Rotisserie/Convection Oven Combination

MODEL VGG-CO
Service Manual

Fresh ideas in foodservice equipment

BKI LIMITED WARRANTY

2812 Grandview Dr. • Simpsonville, SC 29680 • USA
(864) 963-3471 • Toll Free: (800) 927-6887 • Fax: (864) 963-5316

WHAT IS COVERED

This warranty covers defects in material and workmanship under normal use, and applies only to the original purchaser providing that:

- The equipment has not been accidentally or intentionally damaged, altered or misused;
- The equipment is properly installed, adjusted, operated and maintained in accordance with national and local codes, and in accordance with the installation and operating instructions provided with this product.
- The serial number rating plate affixed to the equipment has not been defaced or removed.

WHO IS COVERED

This warranty is extended to the original purchaser and applies only to equipment purchased for use in the U.S.A.

COVERAGE PERIOD

- Warranty claims must be received in writing by BKI within one (1) year from date of installation or within one (1) year and three (3) months from data of shipment from the factory, whichever comes first.
- COB Models: One (1) Year limited parts and labor.
- COM Models: Two (2) Year limited parts and labor. COM convection ovens also have a two (2) year door warranty.
- CO1 Models: Two (2) Year limited parts and labor. Five (5) Year limited door warranty.
- BevLes Products: Two (2) Year limited parts and labor.
- Warranty period begins the date of dealer invoice to customer or ninety (90) days after shipment date from BKI, whichever comes first.

WARRANTY COVERAGE

This warranty covers on-site labor, parts and reasonable travel time and travel expenses of the authorized service representative up to (100) miles round trip and (2) hours travel time and performed during regular, weekday business hours.

EXCEPTIONS

Any exceptions must be pre-approved in advance and in writing by BKI. The extended door warranty on convection ovens years 3 through 5 is a parts only warranty and does not include labor, travel, mileage or any other charges.

EXCLUSIONS

- Negligence or acts of God,
- Thermostat calibrations after (30) days from equipment installation date,
- Air and gas adjustments,
- Light bulbs,
- Glass doors and door adjustments,
- Fuses,
- Adjustments to burner flames and cleaning of pilot burners,
- Tightening of screws or fasteners,
- Failures caused by erratic voltages or gas suppliers,
- Unauthorized repair by anyone other than a BKI Factory Authorized Service Center,
- Damage in shipment,
- Alteration, misuse or improper installation,
- Thermostats and safety valves with broken capillary tubes,
- Freight – other than normal UPS charges,
- Ordinary wear and tear,
- Failure to follow installation and/or operating instructions,
- Events beyond control of the company.

INSTALLATION

Leveling, as well as proper installation and check out of all new equipment - per appropriate installation and use materials – is the responsibility of the dealer or installer, not the manufacturer.

REPLACEMENT PARTS

BKI genuine Factory OEM parts receive a (90) day materials warranty effective from the date of installation by a BKI Factory Authorized Service Center.

Table of Contents

Table of Contents **1**
Introduction **2**
Safety Precautions 2
Safety Signs and Messages 2
Specific Precautions 3
Safe Work Practices 3
Safety Labels 6
Health And Sanitation Practices 7
Food Handling 7
Storage Of Raw Meats 7
Coding Cooked Foods 7
Storage Of Prepared Foods 7
Operation **8**
VGG-8 Operation 8
Controls and Indicators 9
Programming the Controller Using the Touchscreen Interface 14
Programming the Controller Using the RS-232 Interface 15
Operation with the Controller 16
Accessory Use 17
CO Operation 18
Controls and Indicators 18
Operating the Oven 20
Cooking Suggestions 20
Installation **21**
Unpacking and Handling 21
Location and Clearance 21
Wiring 21
Maintenance **22**
Scheduled Maintenance 22
VGG Oven Cleaning (Daily) 22
CO Oven Cleaning 25
Troubleshooting 26
VGG 26
CO 27
Parts List **29**
VGG Parts 29
Accessories 47
CO Parts 48
Components 57
Wiring Diagrams **58**

Introduction

Your ***BKI*** VGG-CO is a computer controlled VGG-8 rotisserie oven mounted atop a convection oven. The VGG-8 utilizes a revolving mechanism and convection heat to ensure even product cooking. A touchscreen control and switches are provided to allow for quick setup and operation. The convection oven is 7.14 cubic feet and has a solid state timing control. Both units have removable components that allow for easy maintenance and cleaning.

The ***BKI*** name and trademark on this unit assures you of the finest in design and engineering -- that it has been built with care and dedication -- using the best materials available. Attention to the instructions in this manual regarding proper installation, operation, and maintenance will result in long lasting dependability and ensure the highest profitable return on your investment.

NOTICE

PLEASE READ THIS ENTIRE MANUAL BEFORE OPERATING THE UNIT. If you have any questions, please contact your BKI Distributor. If they are unable to answer your questions, phone the applicable BKI Technical Services Department:

BKI North America: (864) 963-3471
BKI Europe: (44) 0870 9904242

Safety Precautions

Always follow recommended safety precautions listed in this manual. Below is the safety alert symbol. When you see this symbol on your equipment, be alert to the potential for personal injury or property damage.

Safety Signs and Messages

The following Safety signs and messages are placed in this manual to provide instructions and identify specific areas where potential hazards exist and special precautions should be taken. Know and understand the meaning of these instructions, signs, and messages. Damage to the equipment, death or serious injury to you or other persons may result if these messages are not followed.

⚠DANGER This message indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠WARNING This message indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

⚠CAUTION This message indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE This message is used when special information, instructions or identification are required relating to procedures, equipment, tools, capacities and other special data.

Specific Precautions

⚠CAUTION

Equipotential Ground Plane

When a high current flows through a conductor, differences in potential appear between the conductor and nearby metallic surfaces near the appliance. As a result, sparks may be produced between the appliance and surrounding metal surfaces. These sparks could cause serious injury, damage, or fire.

BKI provides an Equipotential ground terminal for the connection of a bonding conductor after the installation of the appliance per IEC60417-1. This terminal is located on the drive side of the oven base and is marked with this symbol.

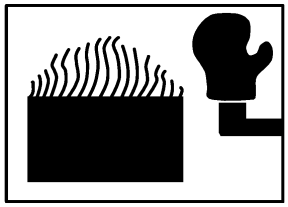
NOTICE

Full Disconnection for IEC / CE Regulations

In accordance with Local and/or National wiring codes, the installer must provide a means of full disconnection for overvoltage Category III conditions. An IEC approved cord and plug combination will meet this requirement.

Units not provided with a cord and plug do not meet this requirement. In accordance with Local and/or National wiring codes, the installer must provide the means of full disconnection.

Safe Work Practices



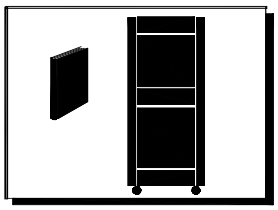
Wear Safe Clothing Appropriate To Your Job
Always wear your insulated mitts when handling hot oven parts or touch any hot metal surface. If you lose or damage your mitts, you can buy new ones at your local restaurant equipment supply store or from your local ***BKI*** Distributor.

Always wear non-skid shoes when working around the oven or any other equipment.

Never wear loose clothing such as neckties or scarves while operating this equipment. Keep loose hair tied back or in a hair net while operating this equipment.

Always wear appropriate personal protection equipment during the cleaning process to guard against possible injury.

WARNING – DANGEROUS VOLTAGE
This equipment uses high voltage. Serious injury can occur if you or any untrained or unauthorized person installs, services, or repairs this equipment. Always Use an Authorized Service agent to Service Your Equipment.

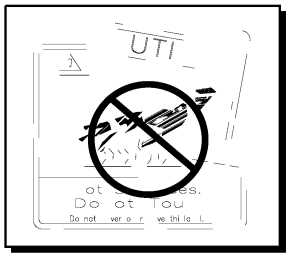


Keep this manual with the Equipment
This manual is an important part of your equipment. Always keep it near for easy access. If you need to replace this manual, phone the applicable BKI Technical Services Department:

BKI North America: (864) 963-3471
BKI Europe: (44) 0870 9904242

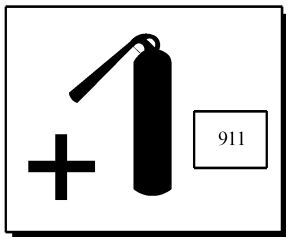
Protect Children
Keep children away from this equipment. Children may not understand that this equipment is dangerous for them and others.

NEVER allow children to play near or operate your equipment.



Keep Safety Labels Clean and in Good Condition
Do not remove or cover any safety labels on your equipment. Keep all safety labels clean and in good condition. Replace any damaged or missing safety labels. Refer to the Safety Labels section for illustration and location of safety labels on this unit. If you need a new safety label, obtain the number of the specific label illustrated on page 6, then phone the applicable BKI Technical Services Department:

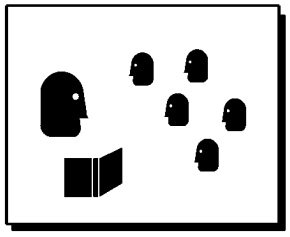
BKI North America: (864) 963-3471
BKI Europe: (44) 0870 9904242



Be Prepared for Emergencies
Be prepared for fires, injuries, or other emergencies.

Keep a first aid kit and a fire extinguisher near the equipment. You must use a 40-pound Type BC fire extinguisher and keep it within 25 feet of your equipment.

Keep emergency numbers for doctors, ambulance services, hospitals, and the fire department near your telephone.



Know your responsibilities as an Employer

- Make certain your employees know how to operate the equipment.
- Make certain your employees are aware of the safety precautions on the equipment and in this manual.
- Make certain that you have thoroughly trained your employees about operating the equipment safely.
- Make certain the equipment is in proper working condition. If you make unauthorized modifications to the equipment, you will reduce the function and safety of the equipment.

Safety Labels

Label Description	BKI Part #	QTY	Location
Caution – Do not use harsh cleaners when cleaning this unit.	N0166	1	Front Control panel (below switches)
Danger – High Voltage. Turn power off before servicing. May have more than one disconnect switch.	N0202	2(3)	Side covers & Power entry hole on control panel
Danger – This appliance has more than one power supply connection point. Disconnect all power supplies before servicing.	N0298	1	Top of CO back control panel
Warning – For continued protection against risk of fire and electrical shock, replace with 15 Amp fuse only.	N0542	1	On fuse bracket inside component compartment
CO Rating Tag	N0023	1	Bottom of back control panel
Warning – Risk of electrical shock. Appliance must be secured to building structure. See installation instructions.	QC Printed	1	On panel between back control panel and motor plate at bottom

Health And Sanitation Practices

BKI Rotisserie Ovens are manufactured to comply with health regulations and are tested and certified to NSF and FSA standards. You must operate the equipment properly, using only quality products and use meat thermometers to insure meats are thoroughly cooked.

Food Handling

- Wash hands thoroughly in warm, soapy water after handling raw poultry or meats.
- Clean and sanitize all utensils and surfaces that have been in contact with raw products. Clean and sanitize the meat forks or baskets between cooking.
- **Never** place cooked meats on the same surfaces used to prepare raw meats, unless the area has been thoroughly cleaned and sanitized.

Storage Of Raw Meats

- Designate an area or shelf strictly for the storage of all raw meats to be used in the rotisserie.
- Raw product must always be stored at temperatures below 38° F. (3° C.).
- **Never** store or mix raw foods above cooked foods, as *this is a health hazard.* The drippings from raw foods contaminate cooked or processed foods.
- All chicken and chicken parts to be stored overnight must be thoroughly iced down and refrigerated.

Coding Cooked Foods

All products cooked during the day should be sold the same day.

NOTE: It is not the intent of the rotisserie program to have unsold merchandise at the end of the cooking day. Follow your company's procedures for the handling of any leftover product.

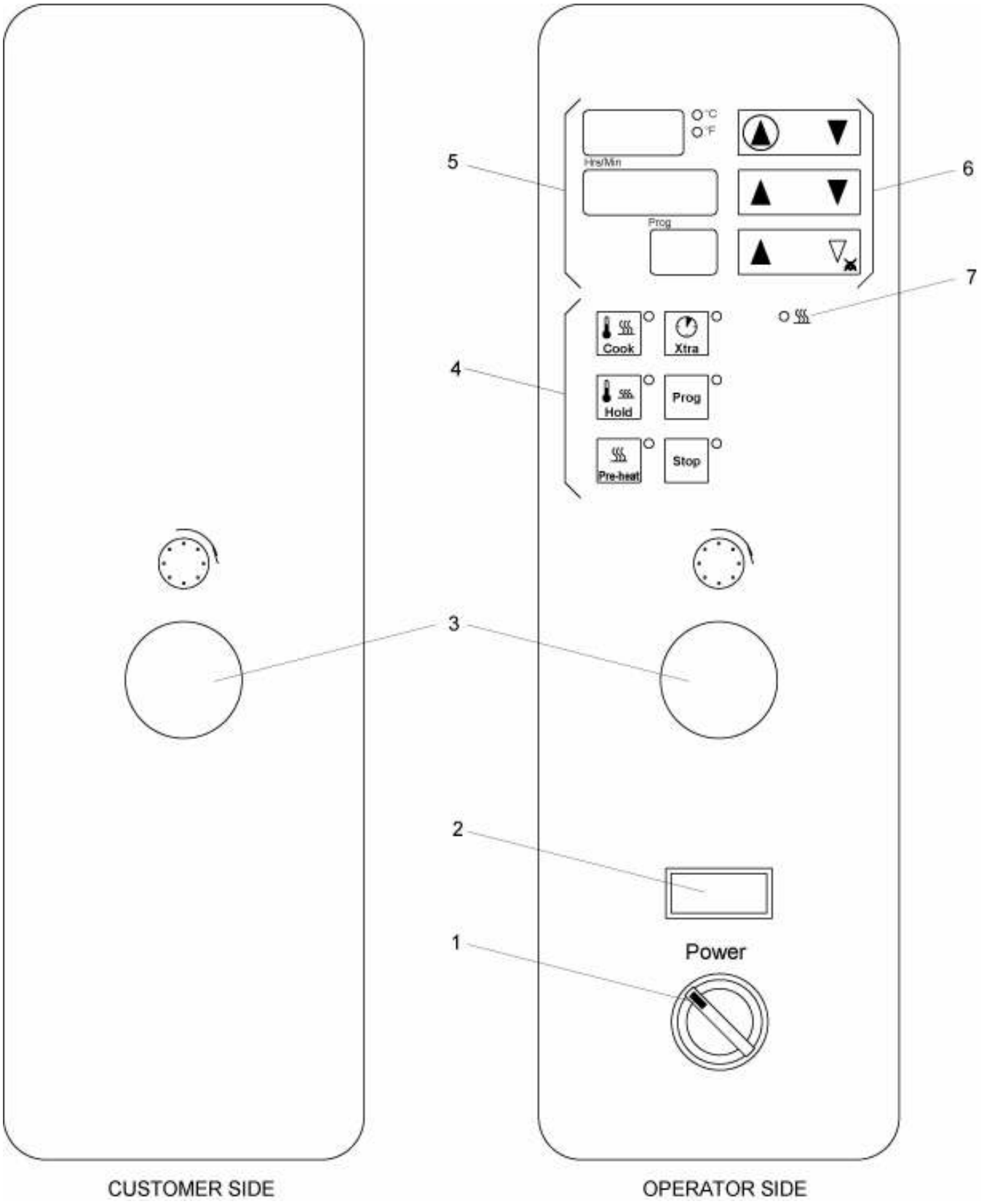
Storage Of Prepared Foods

- Cold foods should be kept at or below 38° F. (3° C.).
- Hot foods must be maintained to meet local health codes, usually a minimum 145° F. (63° C.).

Operation

VGG-8 Operation

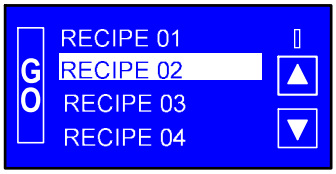
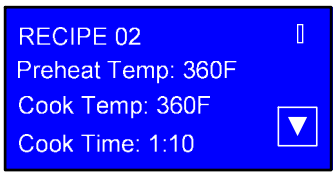
Controls and Indicators

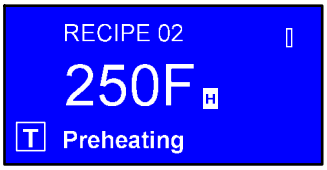
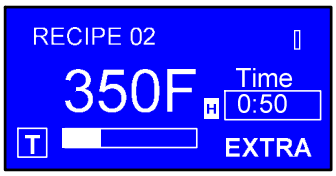


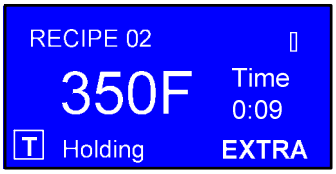
Hardware Controls

Item #	Description	Function
1	Rotor Switch	Depressing the switch allows the operator to "jog" the rotor position when the door is open. Releasing the switch stops the rotor.
2	Main Power Isolator Light	This light illuminates to indicate that power is being applied to the oven from the Main Power Isolator (Circuit Breaker).
3	Main Power Switch	Turns power to the entire unit on or off. When placed in the on position, the Touchscreen controller is powered, lights illuminate and the rotor motor engages (if both doors are closed). When placed in the off position, power is removed from the entire unit.
4	Analog Touchscreen Controller	Used for operation and programming of the oven. A built-in beeper is used to indicate touchscreen presses and other oven functions. It has 15 programmable cooking recipes.

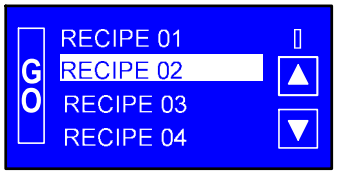
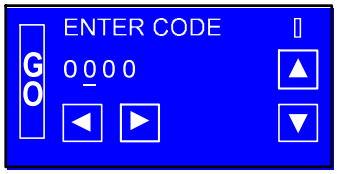
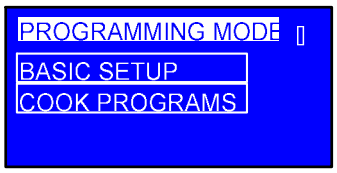
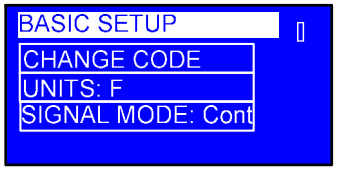
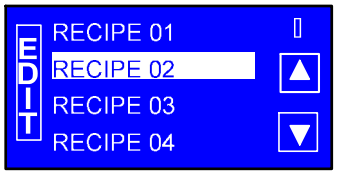
Software Controls – Operation Screens

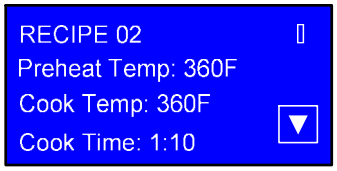
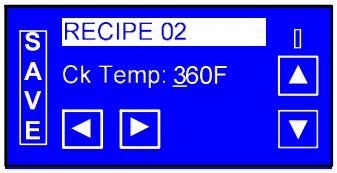
Screen Name	Screen	Description
Startup		Appears when the Main Power Switch is placed in the on position.
Controller Off		Appears after the Startup screen displays. This screen Indicates that the controller is turned off. Touching anywhere on the screen will turn the controller on and display the Recipe Selection screen.
Recipe Selection		Displays a the list of available recipes. The up and down arrow buttons move the highlight box from one recipe to the next. Once the desired recipe is highlighted the user touches the **GO** button to start the cook cycle. Touching the **X** button for 3 seconds turns the controller off. Touching any recipe will show the settings for that recipe.
Recipe Settings		Displays Preheat Temperature, Cook Temperature, Cook Time, Hold Temperature and Cook To settings for a selected recipe. Touching the up and down arrow buttons scroll the screen to view more settings. Touching the **X** button momentarily returns you to the previous screen.
Preheat/Cook Selection		Displays once the user highlights a recipe and touches the **GO** button if the recipe has a preheat temperature programmed. The user selects where to start the cooking cycle by touching **Preheat** or **Cook**. Touching **Preheat** displays the Preheat screen. Touching Cook displays the Ready To Cook screen. If the Preheat temperature is set to OFF the controller goes directly to the Ready To Cook screen. The **T** button can be used to display the current oven temperature. Touching the **T** button displays the temperature, then automatically returns to the previous screen in 2 seconds. Touching the **X** button momentarily returns you to the previous screen.

Screen Name	Screen	Description
Preheat		Displays once the user touches the **Preheat** option from the Preheat/Cook Selection screen. The Preheat cycle heats the cooking cavity up to the pre-defined preheat temperature. Once this temperature is reached the unit automatically switches to the Ready To Cook mode. A small highlighted letter **H** will appear to the right of the temperature display to indicate that the controller has energized the heating elements. The absence of the letter **H** indicates that the controller has de-energized the heating elements as the oven temperature has reached the set temperature limit. The **T** button works as described for the Preheat/Cook Selection screen. Touching the **X** button for 3 seconds returns you to the Recipe Selection screen.
Ready to Cook		Displays once the user touches the **Cook** option from the Preheat/Cook selection screen or once the preheat cycle is finished or directly from the Recipe Selection screen if no preheat temperature was programmed. When the temperature is within 5° of the cook temperature the controller will emit three 2 second beeps indicating that the product can be loaded. The user places the product to be cooked into the cooking cavity and touches the **COOK** button to start the cooking process. If the door is opened and/or the temperature drops below 25° below the preheat temperature, the screen will flash and beep every 30 seconds until the **COOK** button is touched. The highlighted letter **H** works as described for the Preheat screen. The **T** button works as described for the Preheat/Cook Selection screen. Touching the **X** button for 3 seconds returns you to the Recipe Selection screen.
Cooking		Displays once the **COOK** button is touched from the Ready To Cook screen. This screen shows the cooking temperature, the time remaining in the cook cycle, and the elapsed time shown with the progress bar at the bottom of the screen. Hold the **X** button for 2 seconds to stop the cook in progress. The **EXTRA** button can be used to add more cook time to the cycle. The cook cycle ends when the cook time elapses. This is indicated by three 2 second beeps. If a hold temperature was programmed then the Hold screen is displayed. If no hold temperature was programmed then the screen will flash and beep until touched. The highlighted letter **H** works as described for the Preheat screen. The **T** button works as described for the Preheat/Cook Selection screen. Touching the **X** button for 3 seconds returns you to the Preheat/Cook Selection screen.

Screen Name	Screen	Description
Hold		Displays once the cook cycle is complete if a hold temperature was programmed. This screen displays the hold temperature (or nothing if set to OFF), and the elapsed time in the hold mode. The **EXTRA** button is available here so the product can be cooked for more time if required. The highlighted letter **H** works as described for the Preheat screen. The **T** button works as described for the Preheat/Cook Selection screen. Touching the **X** button for 3 seconds returns you to the Recipe Selection screen.
Extra Cook		Appears when the **EXTRA** button is touched from the Cooking or Hold screens. Use the up and down arrow buttons to set the amount of additional cook or hold time in 5 minute increments. Touch the **GO** button to add the additional time you set. Touch the **X** button to return to the previous screen without adding any extra cook or hold time.

Software Controls – Programming Screens

Screen Name	Screen	Description
Startup		Appears when the Main Power Switch is placed in the on position.
Controller Off		Appears after the Startup screen displays. Indicates that the controller is turned off. Touching anywhere on the screen will turn the controller on and display the Recipe Selection screen.
Recipe Selection		Appears once the Controller Off screen is touched. Touch any recipe for 3 seconds to enter the programming mode. Touch the **X** button for 3 seconds to turn the controller off.
Program Security		Appears upon entering the programming mode and is used to enter a 4 digit passcode. When the controller is first powered, 0000 is used to access the programming mode. Upon subsequent access, if you don't want to use a special passcode but want to leave it 0000 just press the **GO** button. If you do want to use a special passcode, configure one using the Basic Setup screen. Use the left and right arrow buttons to move the cursor under the digit to be changed. The up and down arrow buttons increase or decrease the digit as desired. Touch the **GO** button to submit the security passcode. If the passcode is valid the Programming mode Selection screen will appear. If the passcode is invalid the Program Security screen will reappear showing the passcode you entered. Touch the **X** button to return to the previous screen.
Program Mode Selection		Appears once a valid passcode is entered from the Security screen. Touch the **BASIC SETUP** option to change basic controller parameters. Touch the **COOK PROGRAMS** option to change cook parameters for a specific recipe. Touch the **X** button to return to the Recipe Selection screen.
Basic Setup		Appears when the **BASIC SETUP** option is touched from the Programming Mode Selection screen. Use this screen to configure the controller to display temperature in Fahrenheit of Centigrade, to use short or long beeps at the end of a cook cycle and to modify the four digit passcode. Touch the **X** button to return to the previous screen.
Recipe Edit Selection		Appears when the **COOK PROGRAMS** option is touched from the Programming Mode Selection screen. This screen is used to select the recipe you want to edit. Use the up and down arrow buttons to highlight the recipe then touch the **EDIT** button. Touch the **X** button to return to the previous screen.

Screen Name	Screen	Description
Recipe Parameter Selection		Appears when a recipe is selected and the **EDIT** button is touched from the Recipe Edit Selection screen. This screen is used to select a specific recipe parameter to edit. Use the up and down arrow buttons to scroll through the list of parameters and touch the parameter you want to change. Touch the **X** button to return to the previous screen.
Recipe Parameter Edit		Appears when a recipe parameter is touched from the Recipe Parameter Selection screen. This screen is used to edit a specific recipe parameter. The editable parameters are: Recipe name, Preheat Temp, Cook Temp, Cook Time and Hold Temp. The left and right arrow buttons are used to move the cursor under the character to be changed. The up and down arrow buttons changes the character as desired. The Preheat Temp and Hold Temp parameters can be turned off by scrolling the temperature below 150°. Touch the **SAVE** button to save the changed parameter. Touch the **X** button to abort all changes and return to the previous screen.

Programming the Controller Using the Touchscreen Interface

Use the procedures below to edit a separate recipe or to change the basic controller configuration.

Edit a Recipe

1. Turn on the Main Power Switch. The Startup screen will briefly appear then the Controller Off screen will display.
2. Touch anywhere on the touchscreen. The Recipe Selection screen will appear displaying a list of recipes.
3. Touch any recipe for 3 seconds. The Security screen will appear.
4. Use the up/down and left/right arrow buttons to enter the passcode and touch the **GO** button. The Program Mode Selection screen will appear if a valid passcode is entered.
5. Touch the **COOK PROGRAMS** option. A Recipe Edit Selection screen will appear.
6. Highlight the recipe you want to edit using the up/down arrow buttons then touch the **EDIT** button. The Parameter Selection screen will appear.
7. Use the up/down arrow buttons to view the recipe parameters and touch the parameter you want to edit. The Parameter Edit screen will appear.
8. Change the parameter value using the left/right and up/down arrow buttons then touch the **SAVE** button to save your changes. You will return to the Parameter Selection screen.
9. Repeat the process to change any other parameters.
10. Touch the **X** button as necessary to return to the Recipe Selection screen.

Edit the Basic Setup

1. Turn on the Main Power Switch. The Startup screen will briefly appear then the Controller Off screen will display.
2. Touch anywhere on the touchscreen. The Recipe Selection screen will appear displaying a list of recipes.
3. Touch any recipe for 3 seconds. The Security screen will appear.
4. Use the up/down and left/right arrow buttons to enter the passcode and touch the **GO** button. The Program Mode Selection screen will appear if a valid passcode is entered.
5. Touch the **BASIC SETUP** option. A Basic Setup Selection screen will appear.
6. Touch the parameter that needs to be changed. A Basic Setup Parameter Edit screen appears.
7. Change the parameter value using the left/right and up/down arrow buttons then touch the **SAVE** button to save your changes. You will return to the Basic Setup Selection screen.
8. Repeat the process to change any other parameters.
9. Touch the **X** button as necessary to return to the Recipe Selection screen.

Programming the Controller Using the RS-232 Interface

The TouchTEC controller incorporates an RS-232 interface allowing factory and field personnel to read out, modify and write in the entire recipe and controller configuration using a special Controller Configuration program on a PC. The program allows a user to read the configuration data from the controller, edit any feature of the configuration, write data back to the controller, save the data to a file on the PC and to retrieve the data from a previously created file. The file saved in the PC contains a description field to aid in identifying the contents of the configuration file. Follow the steps below to program the controller using the RS-232 interface.

1. Connect the communications interface module between the serial port on the PC and the controller.
2. Start the Controller Configuration program.
3. Select the COM port that the controller will use to communicate with the PC from the pull down list in the Controller Com area.
4. Click the OPEN button and select a previously created configuration file or click the READ button to download the configuration data from the controller.
5. Edit any of the following: Description of the configuration file, Recipe Parameters, Max number of recipes visible, four digit passcode, Unit of Measurement for Temperature display and the Beep Type used at the end of the cook cycle.
6. Touch the SAVE button and save the file using a different name.
7. Touch the WRITE button to upload the new configuration data back to the controller.
8. Disconnect the the communications interface module between the serial port on the PC and the controller.

Operation with the Controller

Use the procedures below to view a separate recipe or to activate a cook cycle using a one of the preprogrammed recipes.

Viewing Recipes

1. Turn on the Main Power Switch. The Startup screen will briefly appear then the Controller Off screen will display.

2. Touch anywhere on the touchscreen. The Recipe Selection screen will appear displaying a list of recipes.

3. Use the up/down arrow buttons to highlight the recipe you wish to view then touch it. A Recipe Settings screen will appear.

4. Use the up/down arrow buttons to view any settings for the recipe selected.

5. Touch the **X** button momentarily to return to the previous screen.

Cooking

1. Turn on the Main Power Switch. The Startup screen will briefly appear then the Controller Off screen will display.

2. Touch anywhere on the touchscreen. The Recipe Selection screen will appear displaying a list of recipes.

3. Use the up/down arrow buttons to highlight the recipe you wish to use then touch the **GO** button. If a preheat temperature was programmed then the Preheat/Cook Selection screen will appear. If no preheat temperature was programmed then the controller enters the Ready To Cook mode displaying the Ready To Cook screen.

   - If the Preheat/Cook Selection screen appears, do either of the following:
     - Touch the **Preheat** option to enter the Preheat mode. The controller will display the Preheat screen. Once the preheat temperature is reached the controller enters the Ready To Cook mode.
     - Touch the **Cook** option to enter the Ready to Cook mode.

   Once the temperature is within 5° of the cook temperature in the Ready To Cook mode the controller will emit three 2 second beeps indicating that the oven can be loaded with product.

4. Load the product into the oven. Use the Rotor Switch on the front panel to operate the rotors during loading.

5. Close the door.

6. Touch the **COOK** button. The controller now enters the cook mode and displays the cooking temperature, time remaining in the cook cycle and the elapsed time. If necessary, use the **EXTRA** button to add more cook time to the cycle. At the end of a cook cycle the controller will emit three 2 second beeps and enter the Hold mode and display the Hold screen if a Hold temperature was programmed. If a Hold temperature was not programmed the screen will flash and beep until touched.

7. Open the oven door and check the product for proper internal temperature. If necessary, use the **EXTRA** button to add more cook time.

8. Unload the product if it is done.

Accessory Use

Standard Meat forks

The standard meat forks are ideal for chicken and poultry. Use the following procedure to prepare the bird for loading in the oven.

1. Fold wings to back, place on back with cavity away from you.
2. Run pointed ends of meat fork through sides of chicken under wings and through thighs (breast up and legs down). Ensure that legs of adjacent birds **DO NOT PRESS TIGHTLY TOGETHER,** this will cause the area of contact to be under-cooked!
3. Load the meat-forks by holding the meat-fork with the handle to the right–hand side, facing up.
4. Open the oven door.
5. Press Rotor Switch to rotate rotor to open position if required.
6. Place the pointed ends of the meat-fork into the left-hand disc holes.
7. From the control side, push the meat-fork into the disc to allow the right-hand (handle end) pins locate into the right-hand disc.
8. Be sure to adjust the meat-fork position so that the handle end locates firmly in the spit groove.

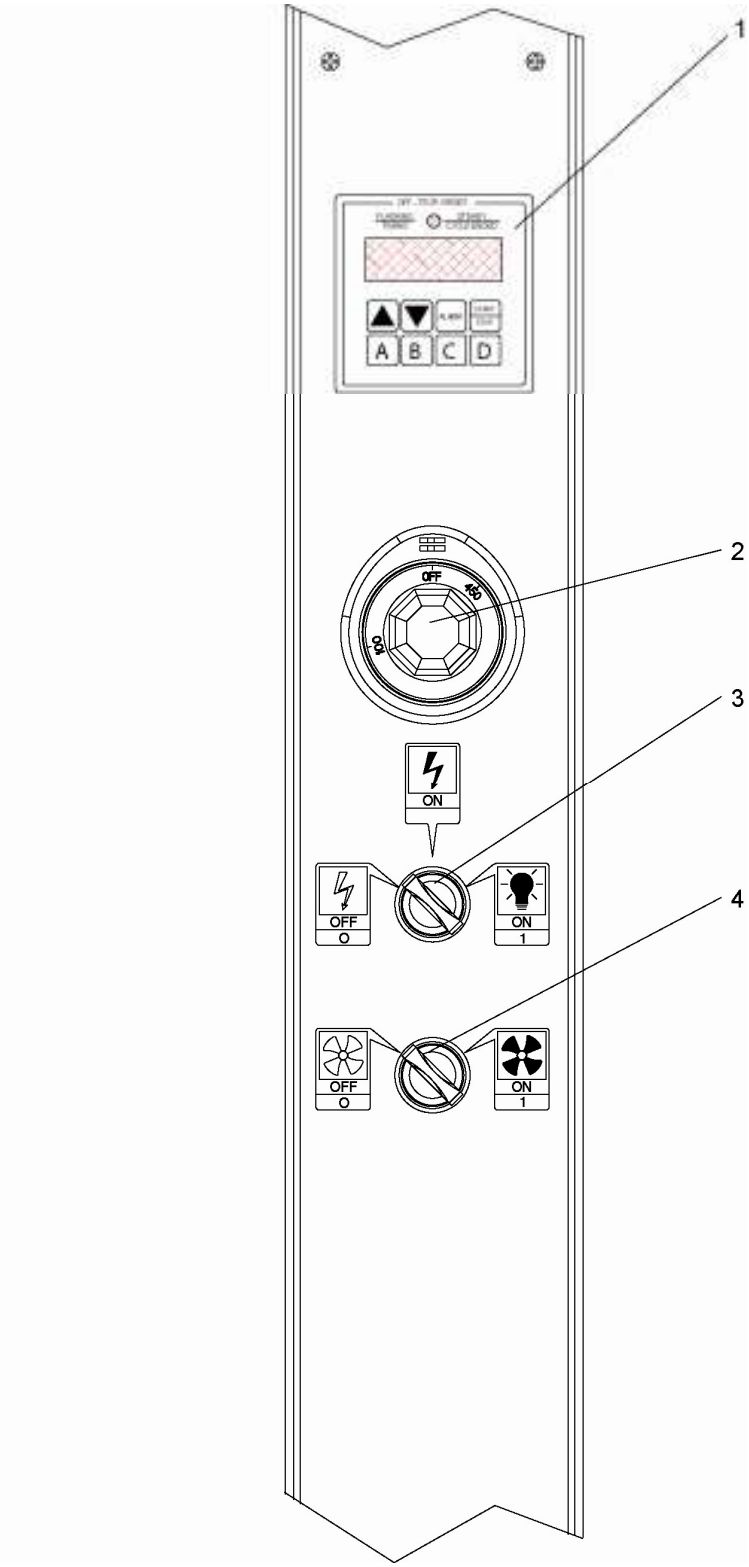
Baskets

Baskets can be used for large chickens or other meats. After loading with product, simply locate pins in the holes on the discs.

CO Operation

Controls and Indicators

Refer to the figure and table below for an explanation of controls and indicators.



Item #	Description	Function
1	Digital Timer	The digital timer consists of an LED, display, beeper and 8 buttons described below: LED indicator – Prior to the start of a timing cycle the LED will be OFF. When running a timing cycle the LED will flash. At the end of a timing cycle the LED will turn ON steady. When idle the LED is off. TIME SELECT (2 arrow buttons) – Two arrow buttons on the front panel are used to set the time. Hold the UP ARROW button down to increase the time. The longer the button is held down, the faster the rate at which the time will increase. The DOWN ARROW button is used in the same manner as the UP ARROW button except it will cause the time to decrease. The time is increased or decreased in 30-second increments. START/STOP button **Starting the Timer** - Pressing this button while the timer is not active will cause the timer to begin counting down the time on the display. **Stopping the Timer -** Pressing this button while the timer is active will stop the timer from counting down and display the remaining time. Time cannot be changed with the TIME SELECT buttons at this point. If this button is pressed again the timer will continue counting down from the point it was stopped. **Resetting the Timer** - Pressing and holding this button for longer than two (2) seconds will reset the timer and the display will return to the original starting time. At this point, time can be changed using the TIME SELECT buttons or the preset buttons. ALARM button - This button allows the user to set an elapsed time at which the internal alarm will sound during a cycle. The time is set by pressing and holding the ALARM button while using the UP and DOWN arrows to change the time. The controller will limit the alarm time to be less than the currently programmed interval cycle time. The default alarm time is 0:00 which disables it. The ALARM time is saved on power down in the same manner as the last interval time. When a time cycle is running and the alarm time has elapsed the internal alarm will sound for 10 seconds. For example, a cycle time 10:00 and alarm time of 2:00 would cause the alarm to sound for 10 seconds once the controller has counted down from 10:00 to 8:00. A, B, C, D preset buttons - These buttons are used to save and recall preset cycle and alarm times, saving operator time and minimizing error when changing interval cycle times and alarm times. To save the current interval and alarm times into one of the preset locations, press and hold the A, B, C, or D preset button for 2 seconds and the controller will double chirp to indicate the times have been saved. To recall any preset time, press and quickly release the appropriate button and the time values are loaded and displayed. Beeper – A beeper sounds when the timer counts down to 0. Pressing the START/STOP button stops the beeper and resets the timer causing the display to return to the original starting time. At this point, time can be changed using the TIME SELECT buttons or the preset buttons. The beeper will also sound for 10 seconds if the alarm time has elapsed during a timing cycle. Display – Used to display the time.
2	Thermostat	Used to set the cook temperature. Turn the thermostat knob clockwise to the desired cook temperature. A light will turn on when the thermostat calls for heat. The light will turn off when the temperature is reached.

Item #	Description	Function
3	Power/Light Switch (3 position)	Used to turn the oven power and lights ON (1) or OFF (0). Place the knob in the center position to power the oven. Place the knob in the fully clockwise position to power the oven and the lights. Place the knob in the fully counterclockwise position to turn the oven off.
4	Blower Switch (2 position)	Used to turn the fan on providing optimum air circulation for even baking. Place the knob in the fully clockwise position to turn on the fan. The fan is automatically turned off when the door is opened.

Operating the Oven

1. Place the Power/Light switch in the fully clockwise position. This will apply power to the oven and turn the lights on.

2. Place the Blower switch in the ON (1) position.

3. Press and hold the TIME SELECT arrow buttons on the digital timer until the desired cook time is displayed or recall a preset time by quickly pressing the appropriate preset button.

4. Pre-heat the oven by setting the thermostat to the desired temperature. The thermostat light will turn off when the temperature is reached.

5. Open the door and load product into oven once the oven has pre-heated. **NOTE**: Keep oven door closed when not loading oven to avoid a sharp decline in oven temperature.

6. Activate the timer by pressing the START/STOP button on the digital timer. The timer will begin to count down.

7. When the timer has counts down to 0, the digital timer beeper will sound. Press the START/STOP button.

8. Using your oven mitts, open the door and unload the product.

9. Place the Blower switch in the OFF (0) position.

10. Place the Power/Light switch in the fully counterclockwise position OFF (0).

Cooking Suggestions

Most recipes can be adjusted for convection oven use by decreasing the temperature by 25° F and decreasing cooking time about 25%. Dishes with cooking times over 45 minutes and that might dry out too much (like lasagna, or meatloaf) should be covered for the first half of the cooking time.

Installation

⚠WARNING Serious injury, equipment damage or death could result if attempting to install this oven yourself. Ensure that an authorized BKI service agent install the oven.

⚠WARNING "Risk of Electrical Shock – Appliance must be secured to building structure. Follow tethering kit instructions for installation" (sold separately).

Unpacking and Handling

It is the owners' responsibility to file all freight claims with the delivering truck line. Inspect all cartons and crates for damage as soon as they arrive. If damage to cartons or crates is found, or if a shortage is found, note this on the bill of lading (all copies) prior to signing.

If damage is found when the equipment is opened, immediately call the delivering truck line and follow up the call with a written report indicating concealed damage to your shipment. Ask for an immediate inspection of your concealed damage item. Packaging material **MUST** be retained to show the inspector from the truck line.

Remove all packing from the interior and exterior of the oven.

Location and Clearance

1. Place the unit not less than 8" from the back wall.

2. Lock the casters so the oven does not move. After every time the oven is moved, make sure the casters are locked.

Wiring

⚠WARNING Electrocution, equipment failure or property damage could result if an unlicensed electrician performs the electrical installation. Ensure that a licensed electrician perform the electrical installation.

The oven, when installed by an authorized BKI service agent, must be grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI NFPA 70-2002. You can obtain this code from:

The National Fire Protection Association
Batterymarch Park
Quincy, MA 02269

Maintenance

⚠CAUTION Failure to comply with the maintenance below could result in a serious accident or equipment damage.

⚠DANGER Failure to remove power from this unit before performing maintenance may cause severe electrical shock. This unit may have more than one disconnect switch.

Scheduled Maintenance

VGG Oven Cleaning (Daily)

Cleaning is not only necessary for sanitary reasons, but will increase sales appeal and maximize operating efficiency.

⚠DANGER Failure to remove power from this unit may cause severe electrical shock. This unit may have more than one disconnect switch.

⚠CAUTION Always wear appropriate personal protection equipment during the cleaning process to guard against possible injury.

Using abrasive cleaners may damage the cabinet finish. Use only a mild soap and water solution.

DO NOT USE OVEN CLEANER on this machine. Caustic cleaners can cause damage to the machine.

Never steam clean or get excess water in the interior of the cabinet as this can damage unit.

This appliance is not intended to be cleaned with a water jet.

1. Allow oven to cool below **50° C (120° F)**.
2. Turn the Main Power Switch off and disconnect from the Main Power Isolator (Circuit Breaker).
3. Empty the grease drawer using the drain valve or fat pump.
4. Remove all food products from the unit.
5. Remove V-spits, meat forks, hanging baskets and drip trays from the unit and place them in a large sink to soak in hot cleaning solution. Clean the components with warm water, a sponge and ***BKI*** Cleaner. Wipe dry with a clean cloth.

6. Remove the Rotor System as described below:

   a. Lift the washer from the groove and slide down the shaft.

   b. Slide each rotor cup down the shaft.

   c. Remove the inner shaft.

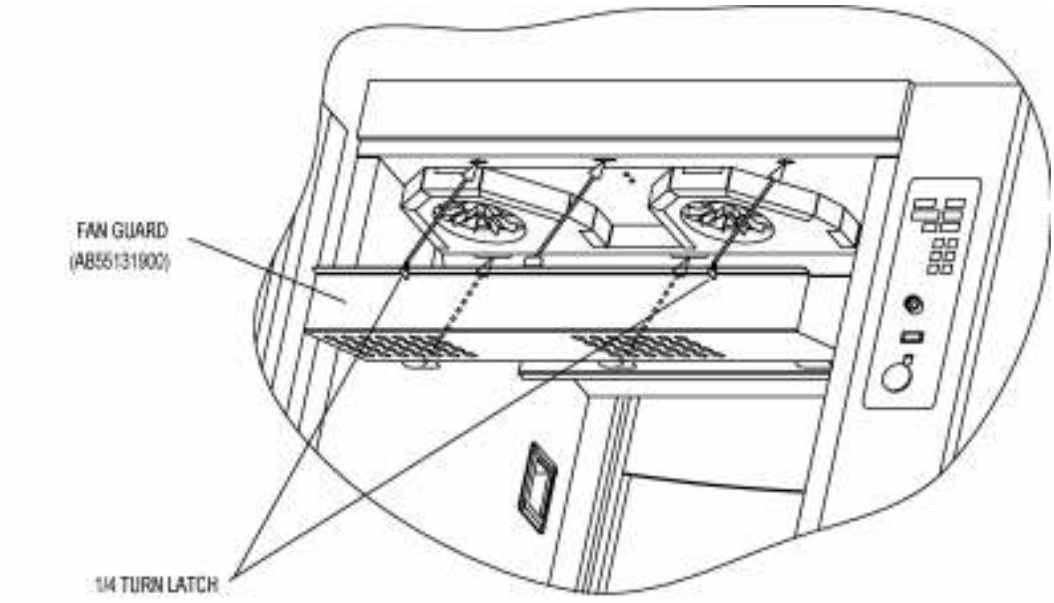
      NOTE: The welded bead in the center of shaft denotes the shaft removal direction.

   d. Remove rotors.

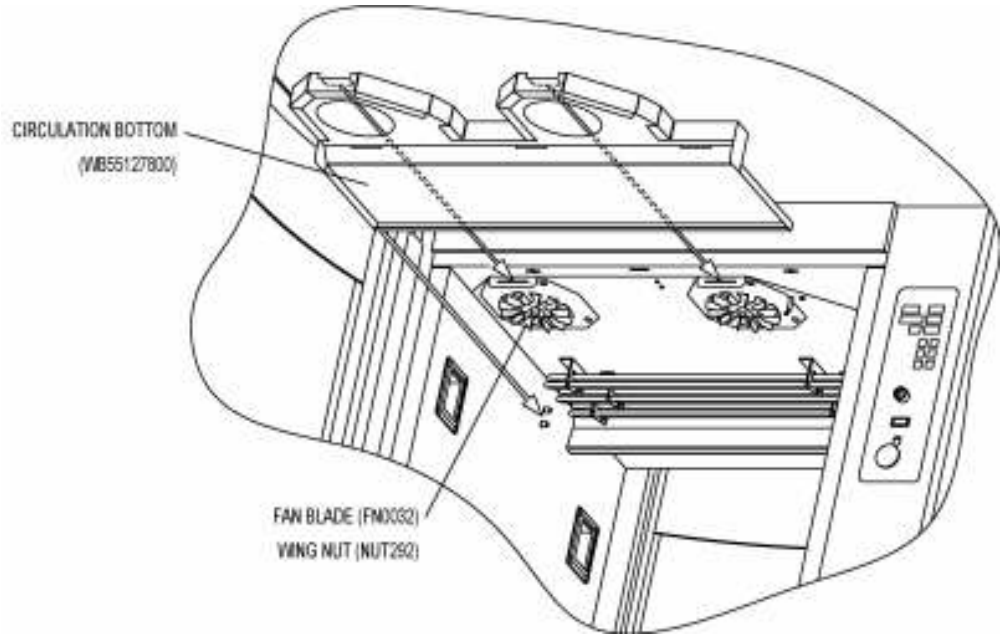
7. Place the Rotor System components in a large sink to soak in hot cleaning solution. Clean the components with warm water, a sponge and ***BKI*** Cleaner. Wipe dry with a clean cloth.

8. Remove the Fan Guard, Circulation Bottom and Fan Blades as described below:

   a. Unfasten (counterclockwise) each 1/4 turn latch on the Fan Guard and remove from oven.



b. Pull Circulation Bottom out of oven then unscrew (clockwise) the wing nut on each Blower Fan to remove the fan blades.



9. Place the Fan Guard and Circulation Bottom in a large sink to soak in hot cleaning solution. Clean the components with warm water, a sponge and ***BKI*** Cleaner. Wipe dry with a clean cloth.

10. Carefully clean the fan blades using a scrub brush and hot cleaning solution. Do not bend or disfigure the fan blades.

11. Clean the top of oven. Carefully clean around fan and surrounding areas.

12. Clean grease drawer and tray area with hot soapy water.

13. Replace the grease drawer.

14. Clean the outside and inside of the rotisserie oven with warm water, a sponge and an approved cleaner which is authorized for use on food surface areas.

15. Reassemble the oven.

CO Oven Cleaning

The oven must be cleaned at the end of each business day. It is easier to clean while still warm. Cleaning is not only necessary for sanitary reasons, but will increase sales appeal and maximize operating efficiency.

⚠DANGER Failure to remove power from this unit may cause severe electrical shock. This unit may have more than one disconnect switch.

⚠CAUTION Using abrasive cleaners may damage the oven finish. Use only a mild soap and water solution.

Never steam clean or get excess water in the interior of the oven as this can damage unit.

DO NOT USE OVEN CLEANER on this machine. Caustic cleaners can cause damage to the machine.

Always wear appropriate personal protection equipment during the cleaning process to guard against possible injury from hot cleaning solution.

1. Place the Power/Light switch in the fully counterclockwise position OFF (0).
2. Turn the circuit breaker off that supplies power to the oven.
3. Wearing your insulated mitts, remove all products from the unit. Remove all food pans, racks and inside bottom pan from the unit and place them in a large sink to soak in hot cleaning solution (BKI Cleaner).
4. Allow the unit to cool to room temperature before proceeding.
5. Lift the left-side tray rack off of its mounting brackets and out of the oven. Repeat this for the right-side tray rack. Place the tray racks in a large sink to soak in hot cleaning solution (BKI Cleaner).
6. Slide the bottom of the inside blower cabinet forward and remove from oven. Place in a large sink to soak in hot cleaning solution (BKI Cleaner).
7. Slide the bottom of the left side insert assembly to the center of the oven and remove from oven. Place the assembly in a large sink to soak in hot cleaning solution (BKI Cleaner).
8. Slide the bottom of the right side insert assembly to the center of the oven and remove from oven. Place the assembly in a large sink to soak in hot cleaning solution (BKI Cleaner).
9. Clean the outside of the oven with warm water, a sponge and approved cleaner which is authorized for use on food surface areas.
10. Wipe the unit dry with a soft cloth.
11. Finish cleaning the parts, wipe dry and reassemble the oven.

Troubleshooting

VGG

Problem	Cause	Possible Solution
Unit will not turn on. Main Power Isolator Light is not lit.	Unit power plug disconnected (where applicable).	Plug unit into mating receptacle.
	Problem with building power supply	Check circuit breaker at building power panel. If problem persists, contact BKI service agent for corrective action.
Unit will not turn on. Main Power Isolator Light is lit.	Blown Fuse	Contact BKI service agent for corrective action.
	Safety cut out thermostat tripped or defective.	Contact BKI service agent for corrective action.
	Defective contactor.	Contact BKI service agent for corrective action.
Rotor not rotating.	Door not completely closed.	Check that both doors are completely closed
	Defective door switch.	Contact BKI service agent for corrective action.
	Blown Fuse	Contact BKI service agent for corrective action.
	Defective contactor.	Contact BKI service agent for corrective action.
	Defective motor or capacitor.	Contact BKI service agent for corrective action.
Rotor will not rotate while depressing Rotor switch with door open but operates with doors closed.	Defective rotor switch.	Contact BKI service agent for corrective action.
Oven does not heat at all.	Improper program settings.	Check program settings.
	Improper parameter settings.	Contact BKI service agent for corrective action.
	Fan cover & circulation bottom not installed or improperly installed.	Check that components are properly installed.
	Fan cover switch defective.	Contact BKI service agent for corrective action.
	Defective controller or contactor.	Contact BKI service agent for corrective action.
	Heating elements not functioning.	Contact BKI service agent for corrective action.
Oven heats up slowly	Improper line voltage.	Contact BKI service agent for corrective action.

Problem	Cause	Possible Solution
	Defective blower fan motor.	Contact BKI service agent for corrective action.
	Defective heating element.	Contact BKI service agent for corrective action.
Control displays “999” under the temperature display.	Temperature probe connection loose or defective probe.	Contact BKI service agent for corrective action.
Cavity lights do not illuminate when unit is on.	Blown fuse.	Contact BKI service agent for corrective action.
Individual cavity lamp does not illuminate.	Defective bulb.	Contact BKI service agent for corrective action.

CO

Problem	Cause	Possible Solution
Unit will not turn on	Oven is not connected to power source.	Have a licensed electrician connect the oven to an appropriate power source.
	Power to unit is not on. Problem with building power panel, circuit breaker/fuse or receptacle.	Check circuit breaker or fuses at building power panel. If problem persists, contact a licensed electrician.
	Blown fuse on unit.	Contact an authorized BKI service agent for corrective action.
	Defective power switch.	Contact an authorized BKI service agent for corrective action.
Unit operates for a period of time, then, the oven shuts down.	Problem with building power panel, circuit breaker/fuse or receptacle.	Check circuit breaker or fuses at building power panel. If problem persists, contact a licensed electrician.
	Defective over-temperature switch.	Contact an authorized BKI service agent for corrective action.
Oven does not heat at all.	Blower fan stopped.	Check that blower switch is on. If problem persists, contact an authorized BKI service agent for corrective action.
	Loose wire on heater circuit.	Contact an authorized BKI service agent for corrective action.
	Defective relay.	Contact an authorized BKI service agent for corrective action.
	Heating elements not functioning.	Contact an authorized BKI service agent for corrective action.
Oven has very slow heat up or recovery.	Heating elements not functioning.	Contact an authorized BKI service agent for corrective action.

Problem	Cause	Possible Solution
Oven will not come up to temperature	Improper thermostat setting.	Check temperature setting.
	Failed heating element or blower fan.	Contact an authorized BKI service agent for corrective action.
Product not cooked thoroughly	Oven not preheated.	Be sure to preheat the oven before placing product in oven.
	Door left open.	Keep door closed when not loading oven.
	Improper time or temperature.	Check for proper time and temperature setting.
	Failed heating element, thermostat or blower fan.	Contact an authorized BKI service agent for corrective action.

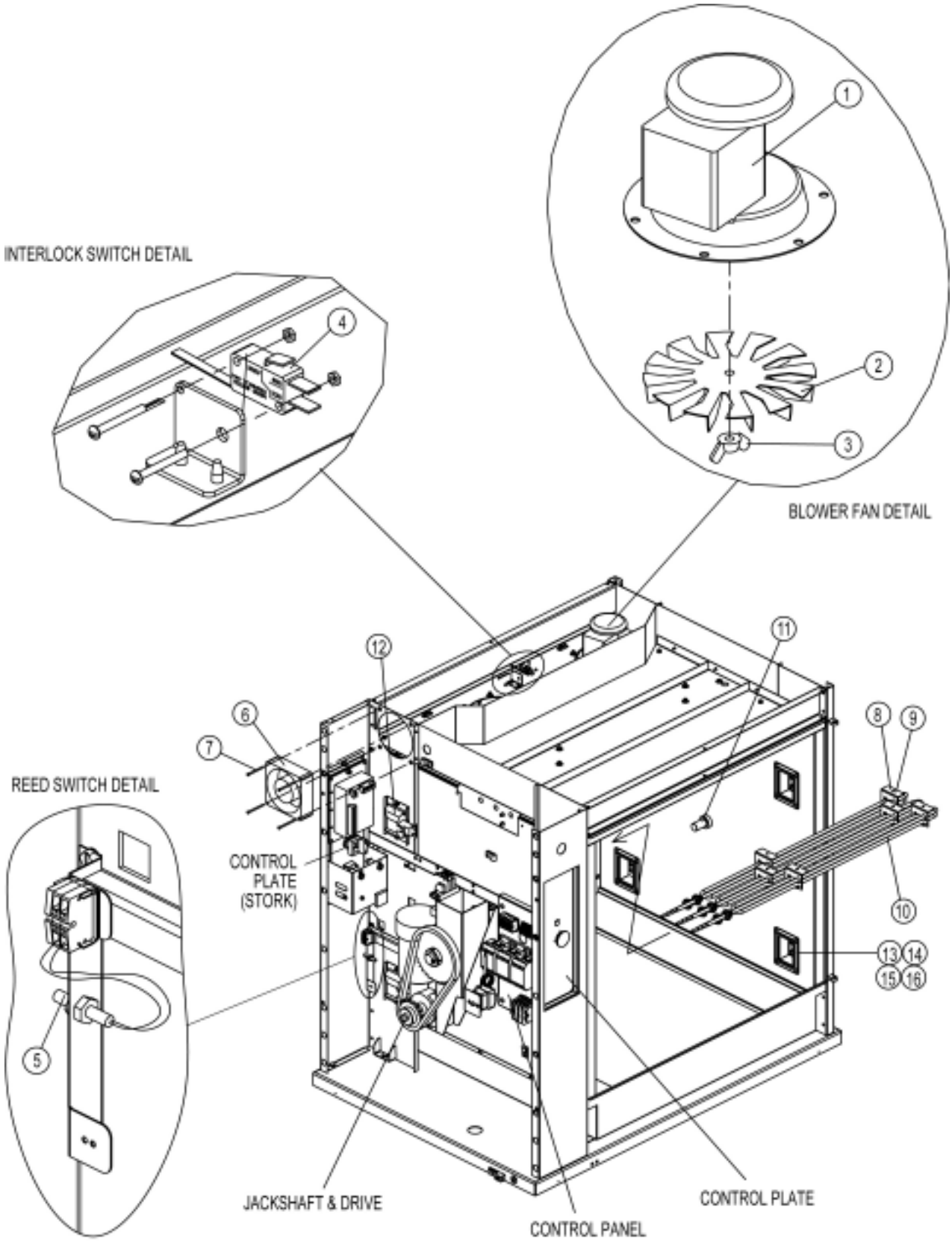
Parts List

Use the information in this section to identify parts. To order parts, call your local ***BKI*** sales and service representative. **Before calling, please note the serial number on the rating tag affixed to the unit.**

VGG Parts

Description	Assembly #	Figure #	Table #
VGG		Figure 1	Table 1
BASE PLATE (VGG-8) BASE PLATE (VGG-16)	AB55129800 AB55129700	Figure 2	Table 2
CONTROL PANEL	AB55122100 AN55131800	Figure 3	Table 3
CONTROL PLATE (CP0046)	AB55145100	Figure 4	Table 4
CONTROL PLATE	AB55123500	Figure 5	Table 5
DRIPPING DRAWER W/DRAIN	AB55130300	Figure 6	Table 6
JACKSHAFT & DRIVE	AB55128700	Figure 7	Table 7
INNER DOOR	AB55126200	Figure 8	Table 8
OUTER DOOR (FLAT)	AB55131600	Figure 9	Table 9
OUTER DOOR (LOWER) OUTER DOOR (UPPER)	AB55126600 AB55126700	Figure 10	Table 10
DRIVE ROTOR	AB45418100	Figure 11	Table 11
PASSIVE ROTOR	AB45418000	Figure 12	Table 12
ROTOR SHAFT WELDMENT	WB45445800	Figure 13	Table 13

Figure 1. *VGG*


INTERLOCK SWITCH DETAIL
BLOWER FAN DETAIL
REED SWITCH DETAIL
CONTROL PLATE (STORK)
JACKSHAFT & DRIVE
CONTROL PANEL
CONTROL PLATE
1
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16

Table 1. *VGG Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	M0096 M0097	2	BLOWER MOTOR, 208-240 V 60 HZ or BLOWER MOTOR, 208-240 V 50 HZ
2	FN0032	2	FAN BLADE
3	NUT292	2	NUT, 1/4"-20 LH THREAD WING
4	S0355	1	MICRO SWITCH
5	S0363	4	MAGNETIC REED SWITCH
6	FN0012	1	COOLING FAN, 230 V
7	SCR315	4	SCREW, #6-32 x 2"
8	B0466	6	UPPER ELEMENT HOLDER
9	B0467	6	LOWER ELEMENT HOLDER
10	C0321 or C0322	3	HEATING ELEMENT, 3400 W 208 V or HEATING ELEMENT, 3400 W 220-240 V
11	SH0111	1	PASSIVE SHAFT
12	LI033UK	8	LAMPHOLDER BODY
13	LI034UK	8	GASKET, LENS
14	LI035UK	8	FRAME, LENS
15	LI038UK	8	LENS, LAMPHOLDER
16	LI037UK	8	REPLACEMENT BULB, 25 W 240 V

Figure 2. *BASE PLATE*

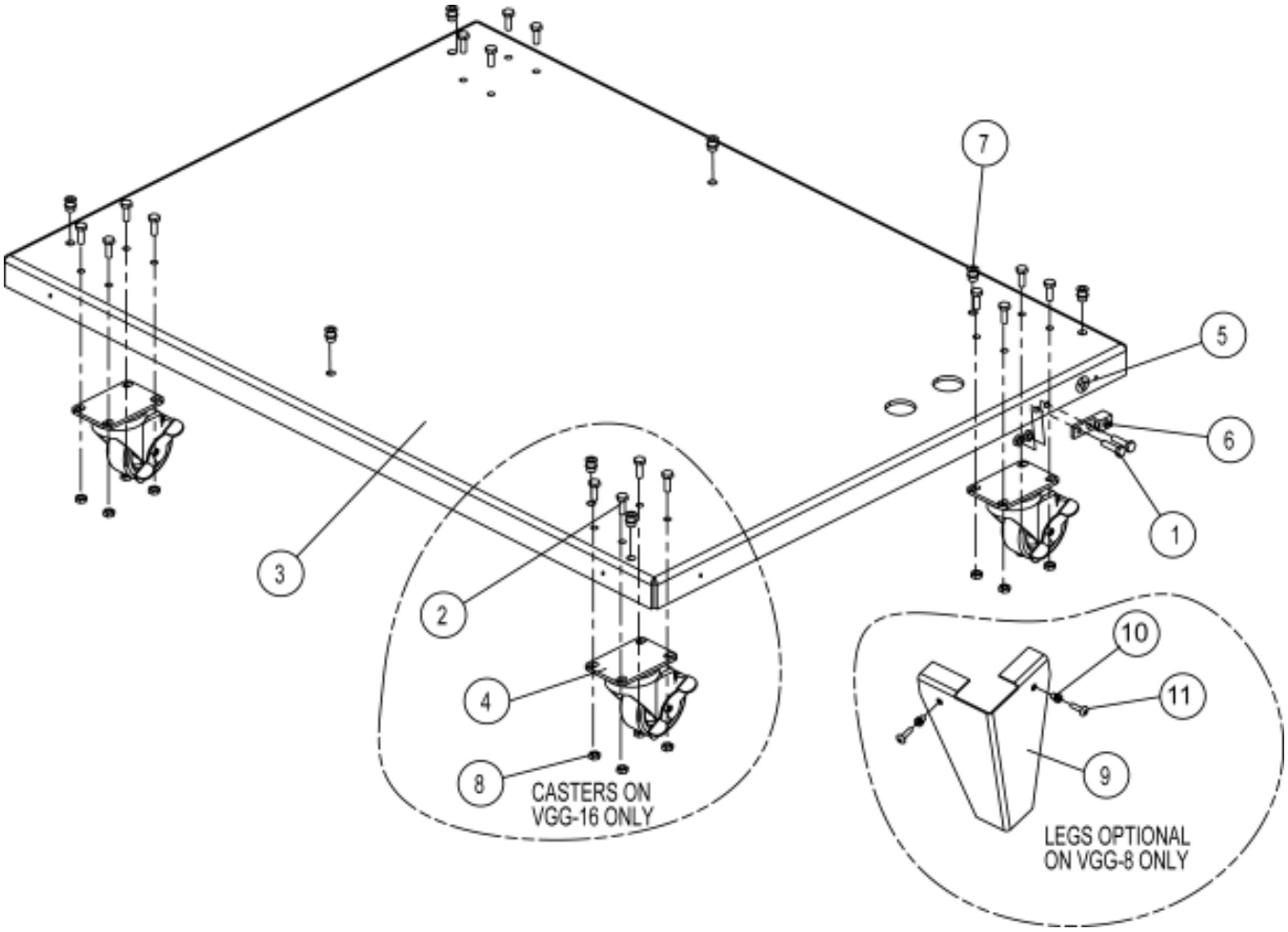


Table 2. *BASE PLATE Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	SCR060	2	SCREW, 1/4-20 X 1 HEX CAP
2	SCR059	16	SCREW, 1/4-20 X 3/4 HEX CAP
3	FB55121810 or PB55121900	1	BASE PLATE, MOBIL (VGG-16) or BASE PLATE, PAINTED, SATIN BLK.(VGG-8)
4	C0415	4	CASTER, 3"SWIVEL W/BREAK
5	N0543	1	DECAL, EQUIPOTENTIAL GROUND
6	F0191	1	GROUND LUG, TWO HOLE STREIGHT
7	F0082	8	THREAD INSERT 1/4-20 STEEL
8	WSH248	18	WASHERED LOCKNUT, 1/4-20 ZINC
9	PB55175000	4	LEG, BASE
10	F0083	8	THREADED INSERT,#10-32 (.08-.13)
11	SCR383	8	#10-32 x 1/2" SCREW

Figure 3. *CONTROL PANEL*

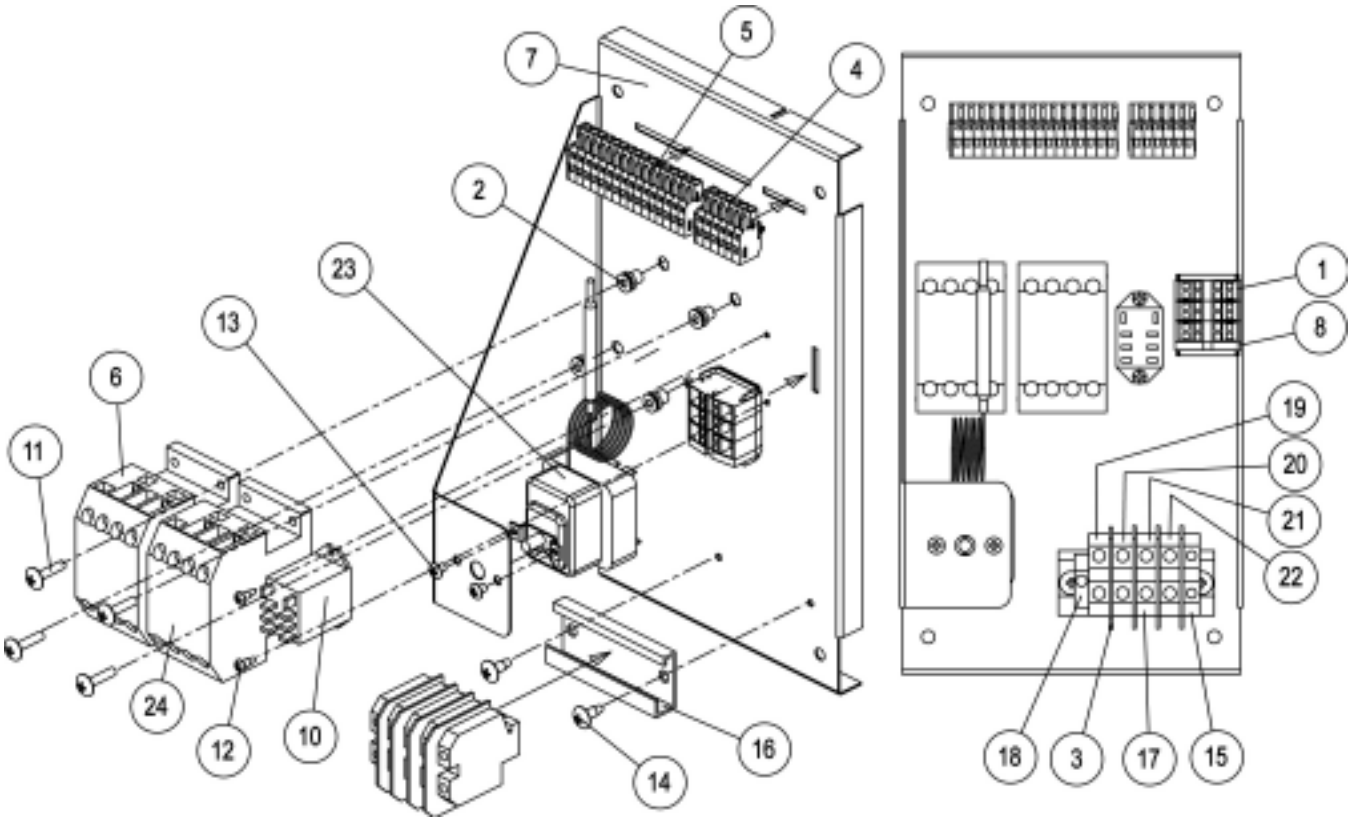


Table 3. *CONTROL PANEL Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	TB0065	3	TERM BLOCK 4 CONDUCTOR W/MTG FOOT
2	F0139	4	THREAD INSERT 8-32 STEEL HEX
3	TE041UK	4	END PLATE, LARGE TW
4	F0378	1	CONNECTOR 231-606 MALE
5	F0382	1	CONNECTOR 231-116/008-000
6	R0172	1	CONTACTOR, 4POLE 45A
7	FB55122009	1	CONTROLS MOUNTING PLATE VGG
8	TB0068	1	TERM BLOCK END PLATE
9	EB55191100 *	1	WIRE HARN COMPONENT PLATE VGG
10	R0171	1	RELAY,SPDT 220/240V COIL UP.MGT.
11	SCR395	4	SCREW, 8-32 X ¾ PHIL PAN
12	SCR444	2	SCREW, 6 X 3/8 PHIL PAN
13	SCR451	2	SCREW, M4 X 5 PHIL PAN
14	SCR138	2	SCREW, 10 X ½ PHIL TR H
15	TB0041	1	TERM BLOCK GROUND BLOCK
16	MA55129400	1	TERM.BLOCK MGT RAIL 3” LONG VGG
17	TB0037	4	TERM BLOCK SAK10 60A/600V
18	TB0040	1	TERM BLOCK STOPS 020616
19	TB0044-L1	2	TERM BLOCK TAGS L1
20	TB0044-L2	2	TERM BLOCK TAGS L2
21	TB0044-L3	2	TERM BLOCK TAGS L3
22	TB0044-N	2	TERM BLOCK TAGS “N”
23	TM015UK	1	THERMOSTAT 3 POLE LIMITED VGUK
24	R0127	1	CONTACTOR, 4POLE 25A

* - not shown

Figure 4. *CONTROL PLATE (CP0046)*

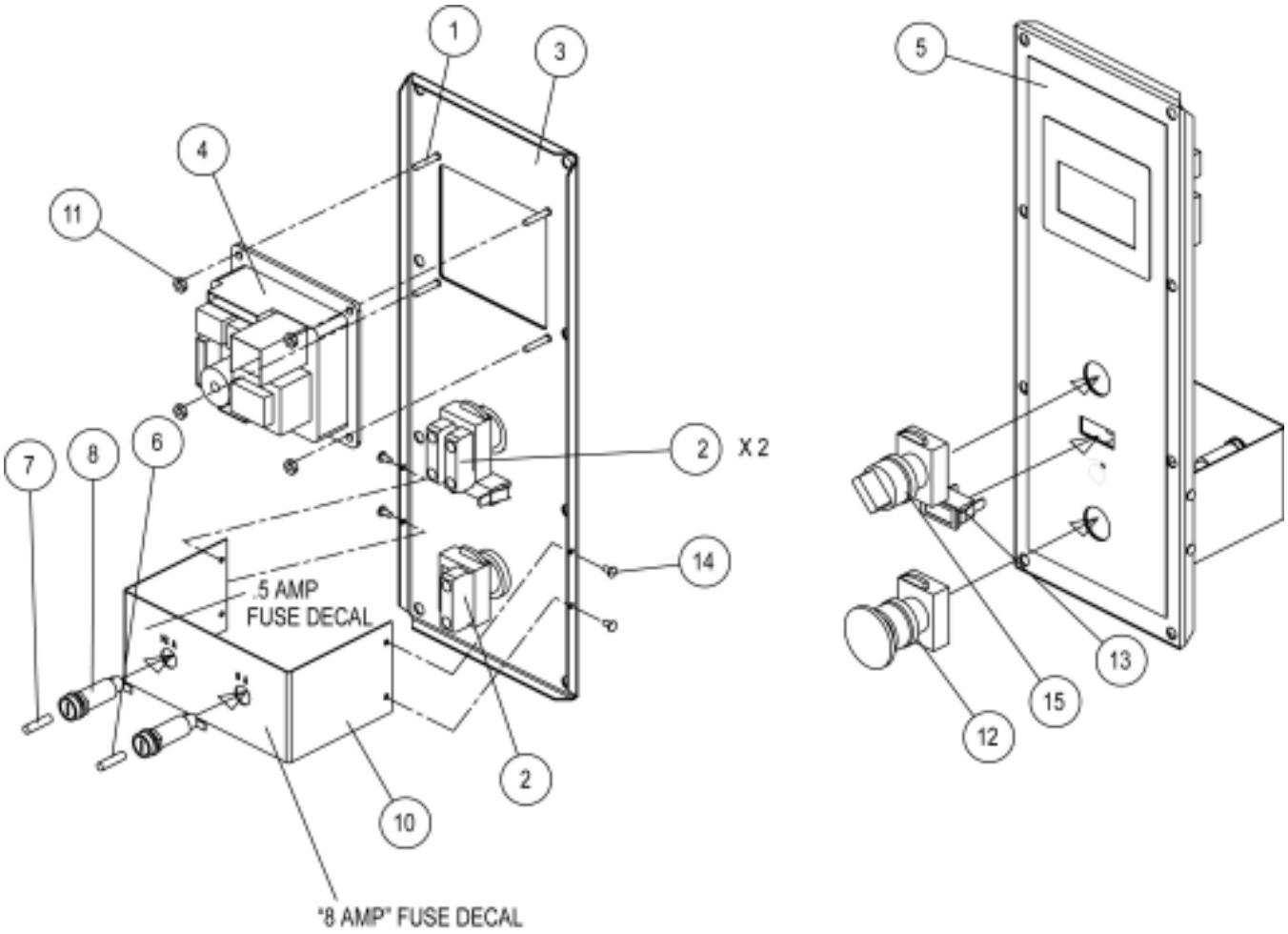


Table 4. *CONTROL PLATE (CP0046) Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	SCR422	4	#6-32x3/4" WELD STUD, SSTL
2	S0307	3	CONTACT BLOCK, 1 N.O.
3	FB55144905	1	CONTROL PLATE - TOUCH
4	CP0046	1	CONTROLLER, OVEN
5	N0550	1	DECAL, TOUCH SCREEN
6	F0394	1	FUSE, 8 A - 5 x 20 mm
7	FU010UK	1	FUSE, 1/2 A - 5 x 20 mm
8	FU004UK	2	FUSEHOLDER - 5 x 20 mm
9	EB55192500 *	1	HARNESS, CONTROL PLATE
10	FB55145009	1	MOUNT - FUSE HOLDERS
11	NUT253	4	NUT, #6-32 HEX NYLON LOCK
12	S0309	1	PB OPERATOR, MUSHROOM HEAD
13	LI016UK	1	PILOT LIGHT, CLEAR - 250V
14	RIV172	4	RIVET, 1/8" X 1/4" CS
15	S0304	1	SWITCH OPERATOR, 2 POSITION

*** -** not shown

Figure 5. *CONTROL PLATE (AB55123500)*

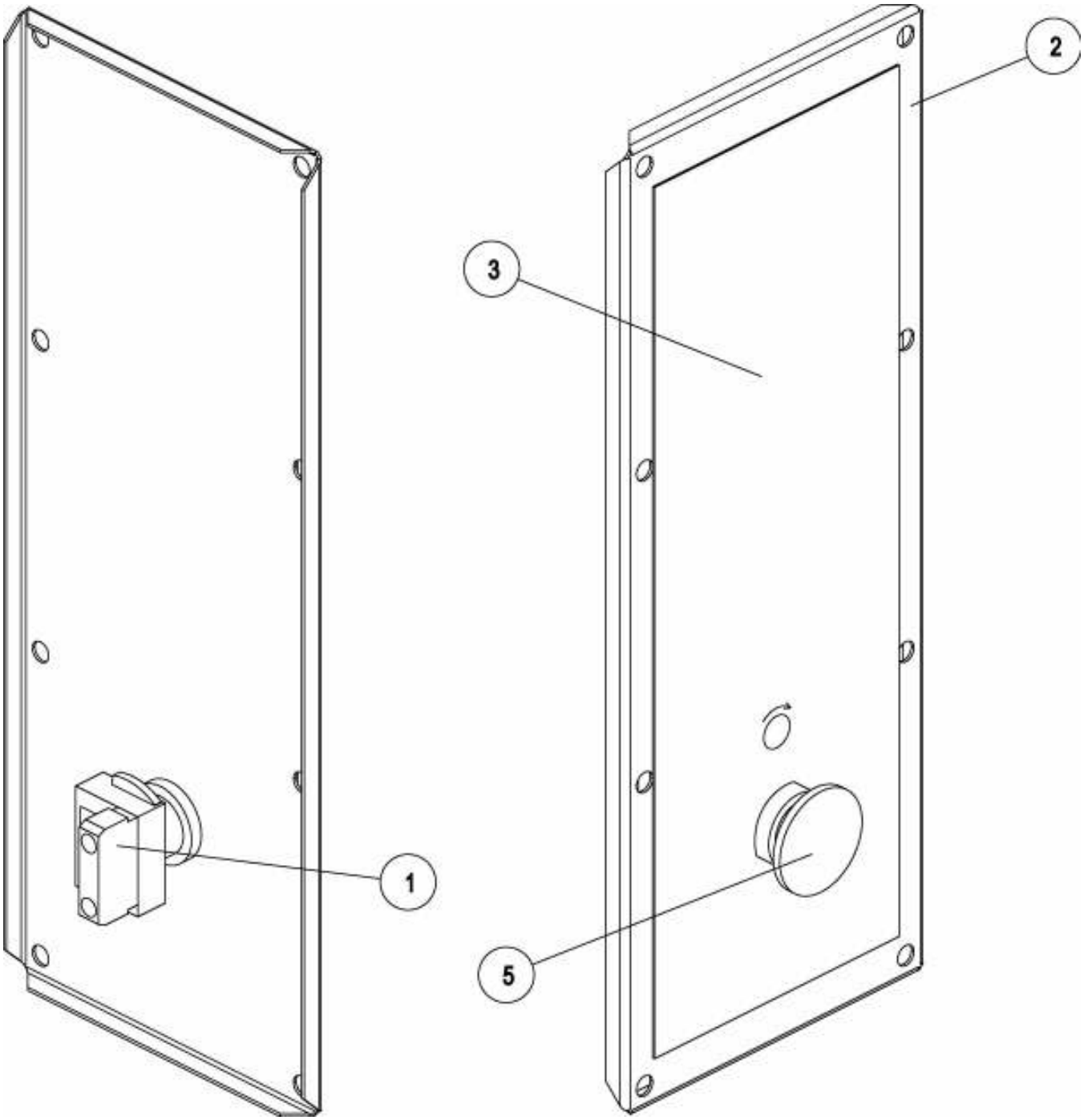


Table 5. *CONTROL PLATE (AB55123500) Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	S0307	1	SWITCH, NO BLOCK GE P9B10VN
2	FB55132503	1	CONTROL PLATE JOG ONLY CONTROLLER
3	N0541	1	DECAL,ROTOR SWITCH VGG
4	EA55191600 *	1	WIRE.HARN.ROTOR SWITCH PLATE,VGG
5	S0309	1	SWITCH, MUSHROOM PUSH BLACK

* - not shown

Figure 6. *DRIPPING DRAWER W/DRAIN (AB55130300)*

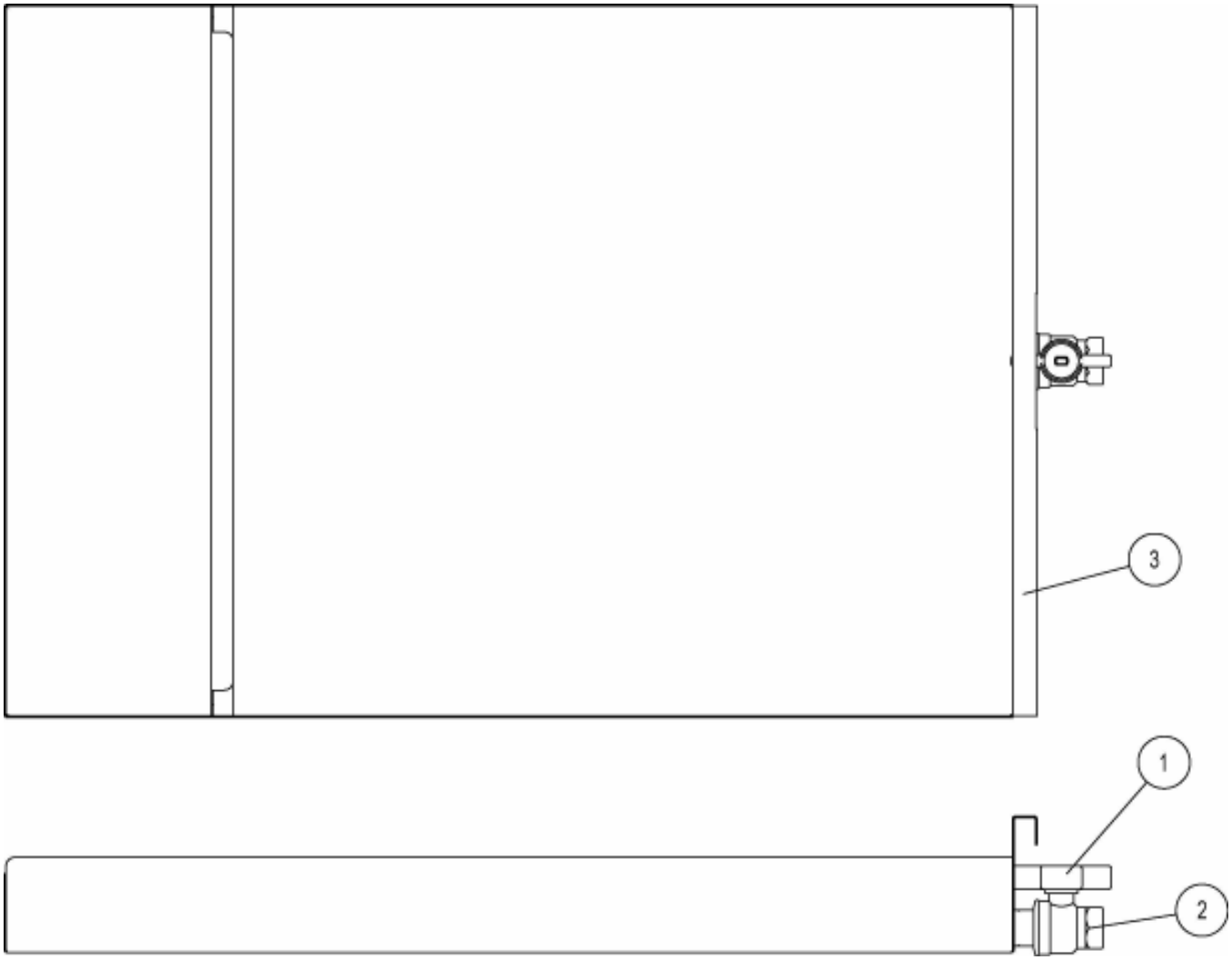


Table 6. *DRIPPING DRAWER W/DRAIN (AB55130300) Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	V0020H	1	HANDLE FOR V0020 BALL VALVE
2	V0020	1	VALVE, BALL 3/4" FULL PORT
3	WB55127200	1	DRIPPING DRAWER WELD.W/DRAIN VGG

Figure 7. *JACKSHAFT & DRIVE (AB55128700)*

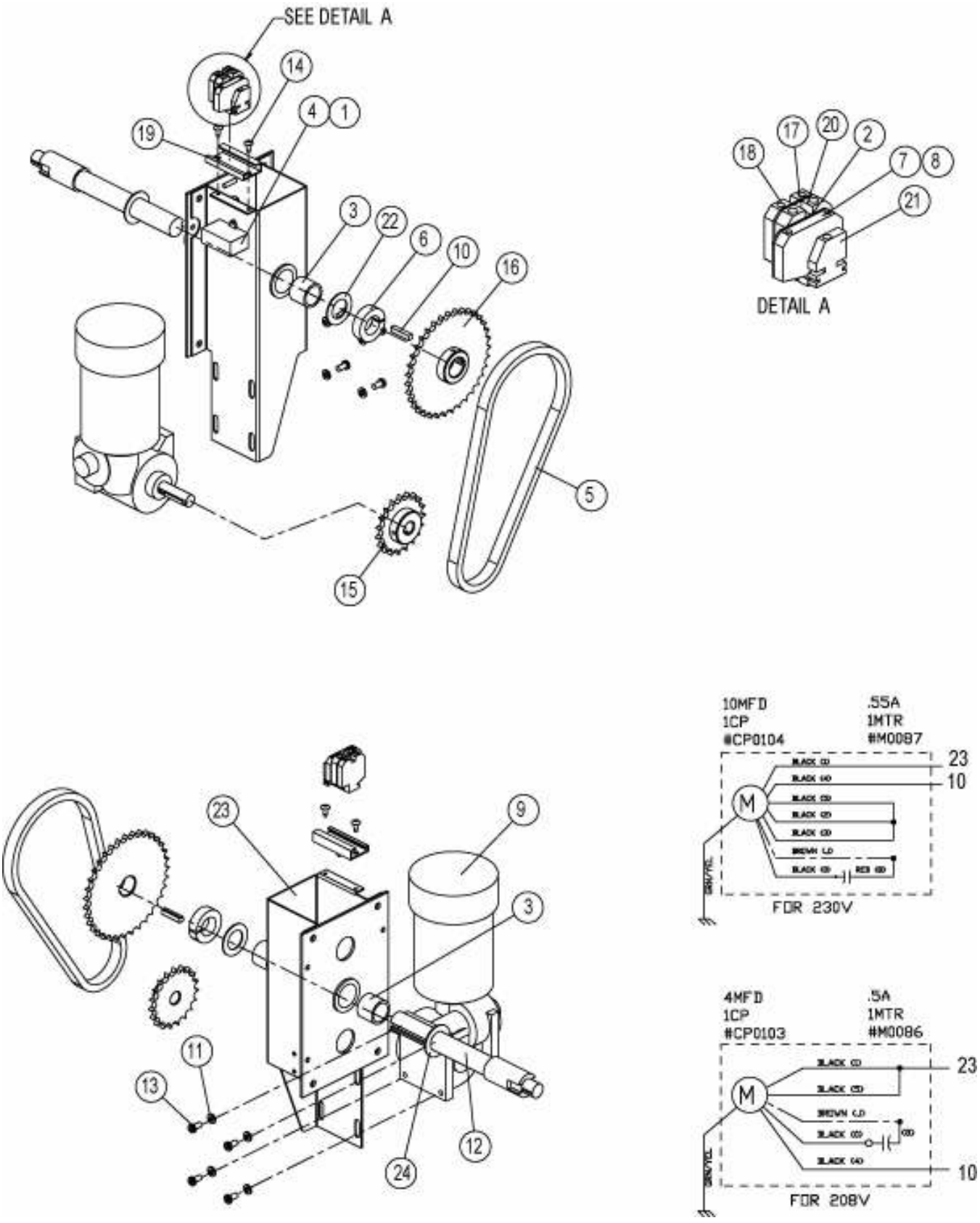


Table 7. *JACKSHAFT & DRIVE (AB55128700) Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	TP0037	0.167 ft.	TAPE, 7/8 DBL SIDE 3M6381 WHITE
2	TE044UK	1	END PLATE AP (ASKI)
3	B0239	2	BEARING, FCJ16F20-8
4		1	CAPACITOR FURNISHED w/ MOTOR
5	CH0013	1	CHAIN, #40 ROLLER 60 PITCHES
6	FT0424	1	CLAMP COLLAR C12L14 1X1.75X.5
7	TE043UK	1	TERMINAL, FUSE CARRIER
8	FU019UK	1	FUSE, T2.0A HRC
9	M0086	1	MOTOR, 208V .48/.5A BALDOR
10	KSA091	1	KEYSTOCK, BOTTOM SHAFT
11	WSH044	4	WASHER, 1/4 LOCK ZINC PLTD
12	SH0110	1	ROTOR DRIVE SHAFT VGG
13	SCR302	4	SCREW, 1/4-20 X 1/2 SOC BUT BLK
14	SCR138	2	SCREW, 10 X 1/2 PHIL TR H
15	S0702	1	SPROCKET, 40B19 5/8" KEYED BORE
16	S0703	1	SPROCKET, 40B35 1" KEYED BORE
17	TB0039	1	TERM BLOCK ENDS 011792
18	TB0041	1	TERM BLOCK GROUND BLOCK
19	MA55113300	1	RAIL, TERM.BLOCK MGT VGUK
20	TB0037	1	TERM BLOCK SAK10 60A/600V
21	TB0040	1	TERM BLOCK STOPS 020616
22	WSH277	2	WASHER, THRUST 1.00 X 1.69 X .06
23	WB55128600	1	JACKSHAFT HOUSING WELD. VGG
24	F0145	2	WIRE JOINT, 3M-30-146

Figure 8. *INNER DOOR (AB55126200)*

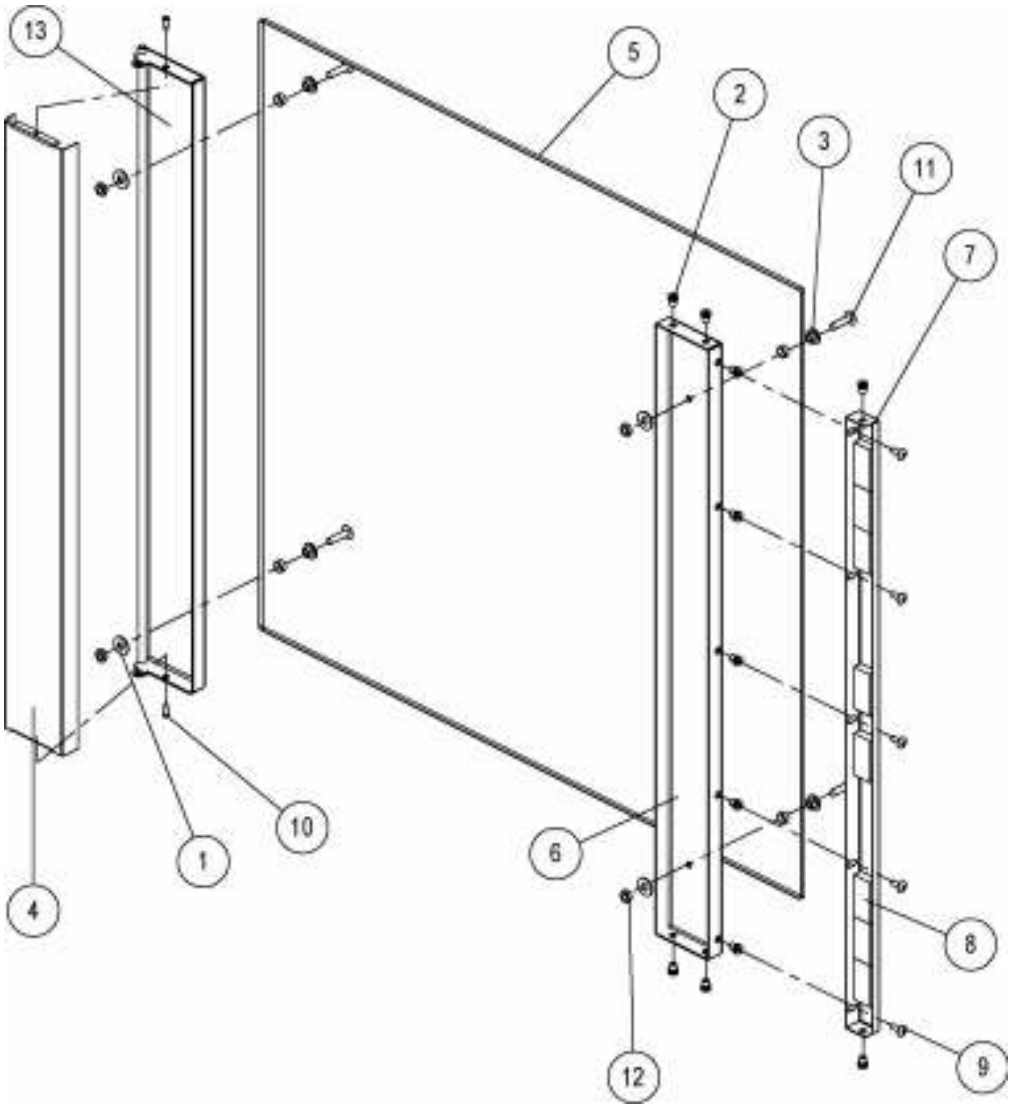


Table 8. *INNER DOOR (AB55126200) Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	WSH266	4	1/4" FLAT WASHER
2	F0139	11	AVK HEX INSERT, #8-32 (.02-.08)
3	BU020UK	4	BUSHING - INNER DOOR GLASS
4	FB55126051	1	COVER – HINGE
5	GL074UK	1	GLASS, INNER DOOR
6	FB55125802	1	HANDLE BRKT-INNER DOOR
7	FB55125903	1	MAGNET MOUNT, INNER DOOR
8	MC0005	8	MAGNET, 1 7/8 x 7/8
9	SCR383	5	SCREW, #10-24X1/2 PHIL TRUSS HD
10	SCR006	2	SCREW,#8X1/2" PHIL HD - TYPE B
11	SCR418	4	SCREW,1/4-20X1 SLTD TRUSS HD
12	WSH248	4	WASHERED LOCKNUT, 1/4"-20
13	WB55125700	1	WELDMENT - HINGE

Figure 9. *OUTER DOOR (FLAT), (AB55131600)*

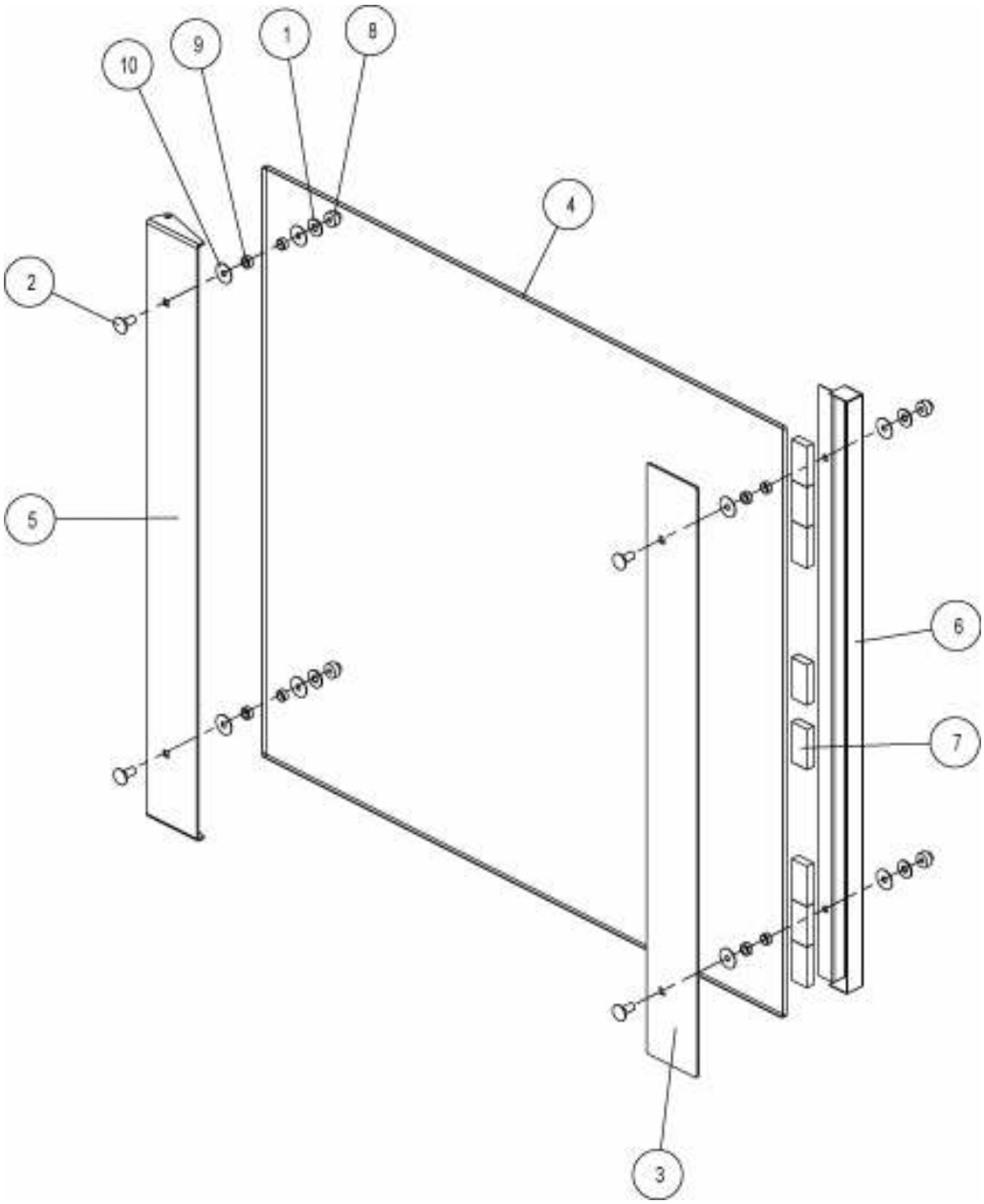


Table 9. *OUTER DOOR (FLAT), (AB55131600) Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	WSH266	4	WASHER, 1/4" FLAT S/S
2	BLT257	4	BOLT, 1/4-20 X 5/8 CARRIAGE
3	FB55131403	1	DOOR LATCH, FLAT DOOR, VGG
4	GL074UK	1	GLASS, INNER DOOR VGUK 8/16
5	FB55131503	1	HINGE, FLAT DOOR, VGG
6	FB55131303	1	MAGNET MOUNT OUT.FLAT DOOR VGG
7	MC0005	8	MAGNET, 1 7/8 X 7/8
8	NUT097	4	NUT, 1/4-20 SS 18-8 CAP
9	SP0031	4	SPACER, PTFE-DOOR GLASS
10	WSH268	8	WASHER, PTFE VG

Figure 10. *OUTER DOOR (UPPER & LOWER)*

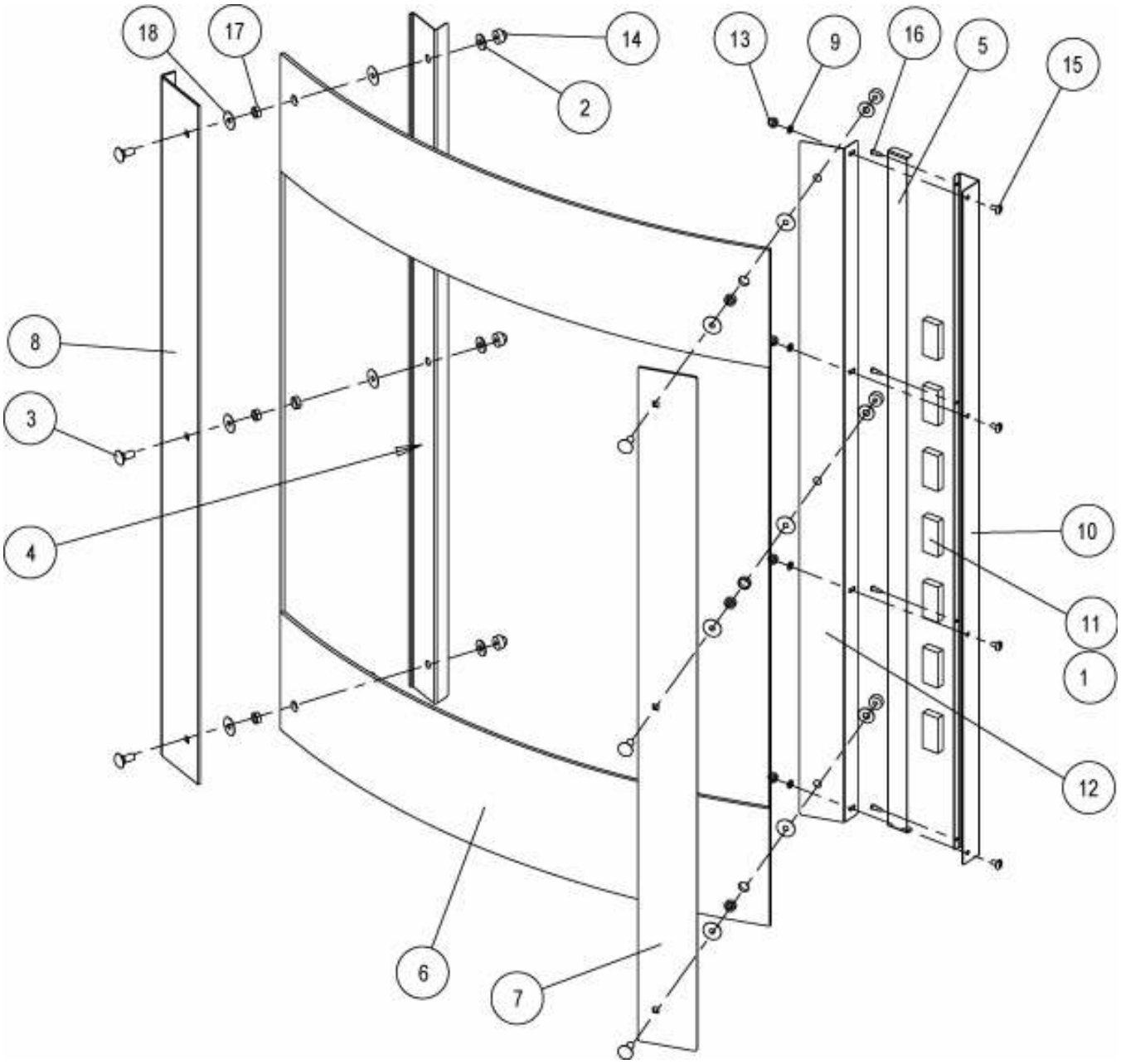


Table 10. *OUTER DOOR (UPPER & LOWER) Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	TP0037	1 ft.	TAPE, 7/8 DBL SIDE 3M6381 WHITE
2	WSH266	6	WASHER, 1/4" FLAT S/S
3	BLT257	6	BOLT, 1/4-20 X 5/8 CARRIAGE
4	FB45443403	1	BUMPER BRKT OUTER DOOR VG14
5	FB45443503	1	COVER, MAGNET VG
6	GL0300M	1	GLASS, VG OUTER DOOR W/MATRIX
7	FB45443203	1	DOOR LATCH PLATE OUTER DOOR
8	FB55126303 or FB55126403	1	HINGE PLATE, LOWER OUTER DOOR, VGG or HINGE PLATE, UPPER OUTER DOOR, VGG
9	WSH246	4	WASHER, #10 INT TOOTH S/S
10	FB45455703	1	MAGNET MOUNT, OUTER DOOR VG
11	MC0005	7	MAGNET, 1 7/8 X 7/8
12	FB55126503	1	MAGNETIC CATCH BRKT.OUT.DOOR VGG
13	NUT132	4	NUT, 10-24 SS 18-8 HEX CAP
14	NUT097	6	NUT, 1/4-20 SS 18-8 CAP
15	SCR136	4	SCREW, 10-24 X 3/8 SLTD TRUSS
16	SCR006	4	SCREW, 8 X 1/2 PHIL PAN
17	SP0031	6	SPACER, PTFE-DOOR GLASS
18	WSH268	12	WASHER, PTFE VG

Figure 11. *DRIVE ROTOR (AB45418100)*

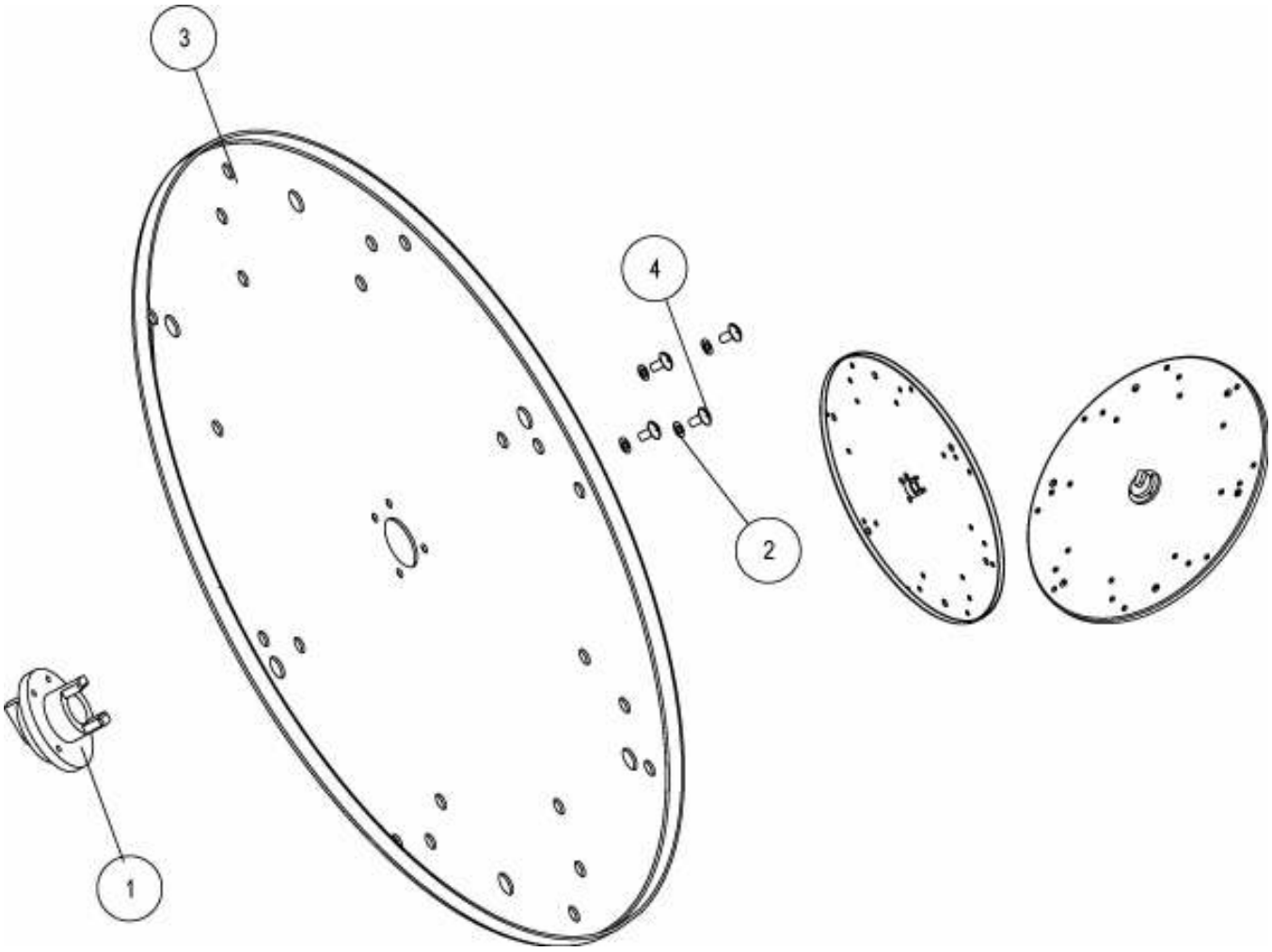


Table 11. *DRIVE ROTOR (AB45418100) Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	DC0101	1	COUPLING, DRIVE VG
2	WSH246	4	WASHER, #10 INT TOOTH S/S
3	RO0040	1	ROTOR, DRIVE SIDE VG8/16
4	SCR434	4	SCREW, 10-24 X 3/8 PHIL TR HD

Figure 12. *PASSIVE ROTOR (AB45418000)*

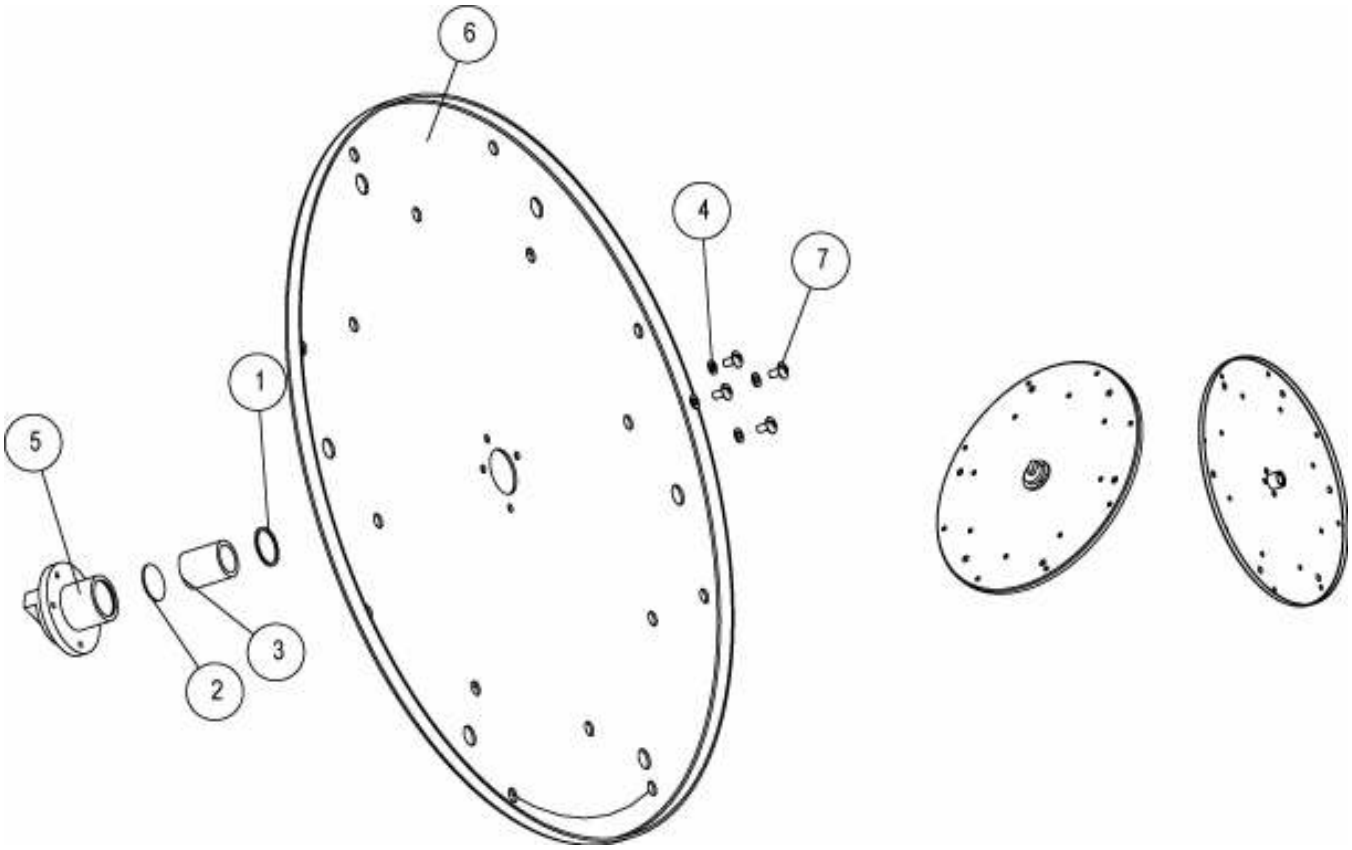


Table 12. *PASSIVE ROTOR (AB45418000) Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	F0362	1	RETAINING RING, 1" INTERNAL
2	B0251	1	BEARING DISC
3	B0250	1	BEARING, SLEEVE .750 ID
4	WSH246	4	WASHER, #10 INT TOOTH S/S
5	DC0100	1	COUPLING, PASSIVE VG
6	RO0041	1	ROTOR, PASSIVE SIDE VG8/16
7	SCR434	4	SCREW, 10-24 X 3/8 PHIL TR HD

Figure 13. *ROTOR SHAFT WELDMENT (WB45445800)*

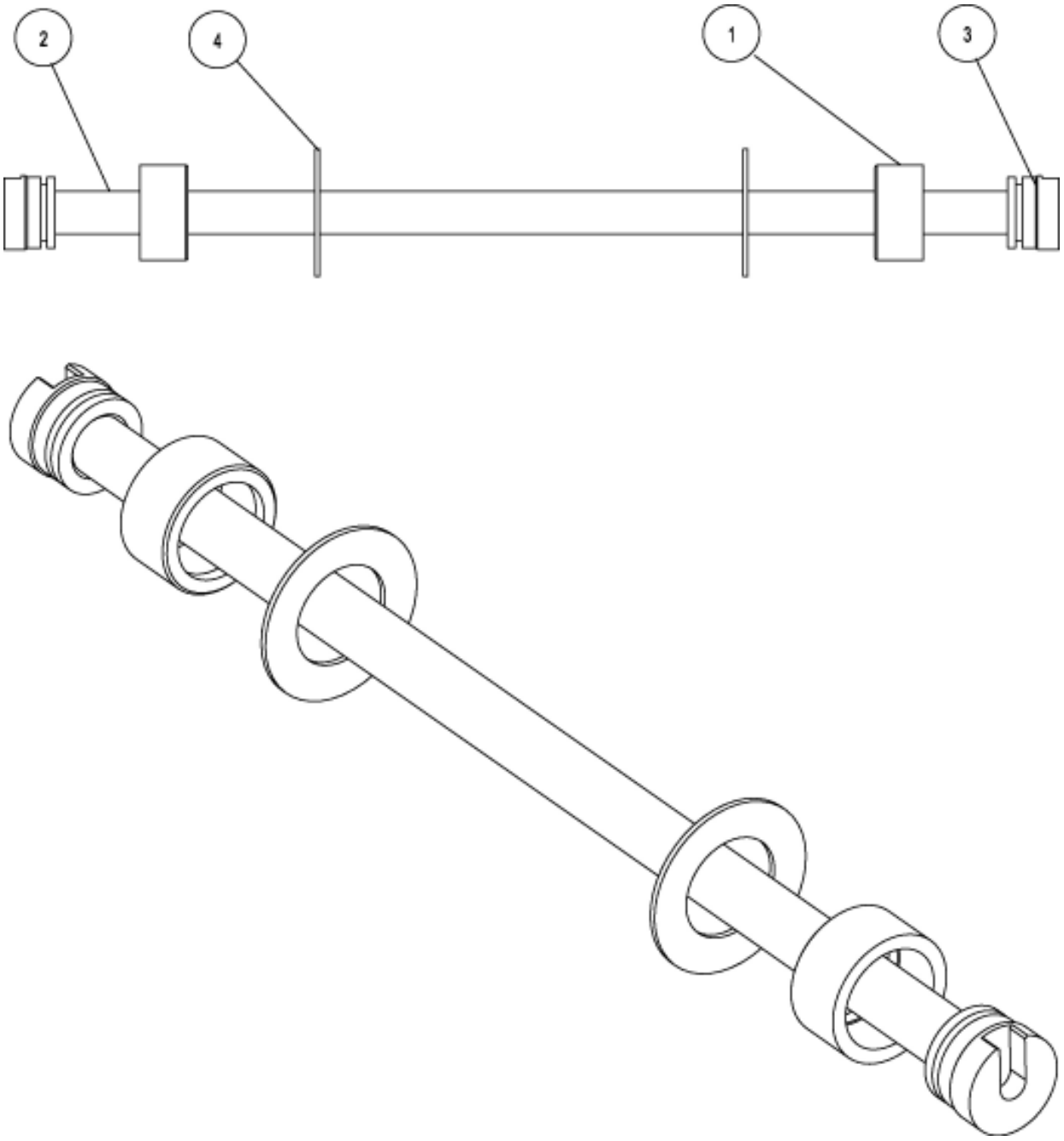


Table 13. *ROTOR SHAFT WELDMENT (WB45445800) Parts**

ITEM #	PART #	QTY	DESCRIPTION
1	DC0102	2	ROTOR CUP, VG
2	MB45446900	1	SHAFT, VG
3	SH0108	2	SHAFT END, VG
4	WSH267	2	WASHER, ROTOR 3" VG

**** -*** *The Rotor Shaft Weldment can only be purchased as an entire unit. Individual parts are shown for identification only and cannot be purchased separately.*

Accessories

Description	Accessory #	Figure #	Item #
BASKET, MEAT CHICKEN 4 GOOSERS	MB0037	Figure 14	1
MEAT BASKET	MB0038	Figure 14	2
MEAT FORK 27.1875	MF0032	Figure 14	3
VEE SPIT	MF0038	Figure 14	4
BKI RUBBER GLOVE	G0099	Figure 14	5

Figure 14. *Accessories*

1

2

3

4

5

CO Parts

Description	Assembly #	Figure #	Table #
Inner Door Assembly	AB30103000	Figure 15	Table 14
Outer Door Assembly	AB30104200	Figure 16	Table 15
Control Panel Assembly	AN30102900	Figure 17	Table 16
Blower Mounting Assembly	SB0306	Figure 18	Table 17
Caster Base Assembly	AN30102600	Figure 19	Table 18

Figure 15. *Inner Door Assembly*

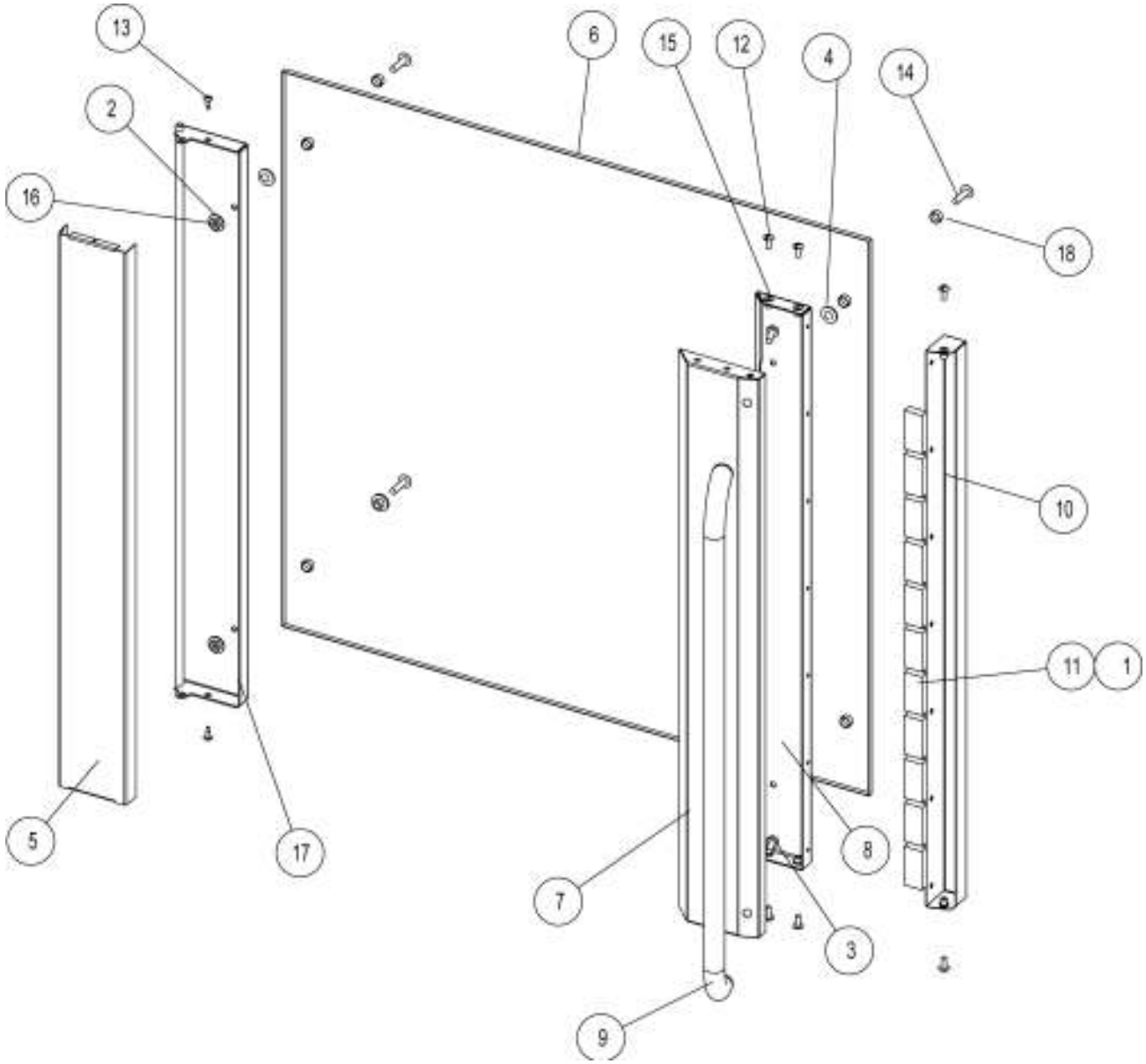


Table 14. *Inner Door Assembly Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	TP0037	1	TAPE, 7/8 DBL SIDE 3M6381 WHITE
2	WSH038	4	WASHER, 1/4 USS FLAT
3	SCR059	2	SCREW, 1/4-20 X 3/4 HEX CAP
4	B0858	4	BUSHING, INNER DOOR GLASS VG
5	FB45419051	1	COVER, HINGE INNER DOOR VG
6	GL0298	1	GLASS, 27.06 X 28.656 VG
7	FB45442451	1	HANDLE BRKT COVER VG14
8	FB45442302	1	HANDLE BRKT VG14
9	H0209	1	HANDLE, VG COMPONENT HDWE
10	FB30102003	1	MAGNET MOUNT, INNER DOOR CO
11	MC0005	11	MAGNET, 1 7/8 X 7/8
12	SCR439	6	SCREW, 8-32 X 1/2 PHIL TR HD
13	SCR005	2	SCREW, 8 X 1/2 PHIL TRUSS HD
14	SCR418	4	SCREW, 1/4-20 X 1 SLTD TR HD
15	F0137	6	THREAD INSERT 8-32 STEEL
16	WSH248	4	WASHERED LOCKNUT, 1/4-20 ZINC
17	WB45418900	1	HINGE, INNER DOOR WELDMENT VG
18	SP007UK	4	SPACER

Figure 16. *Outer Door Assembly*

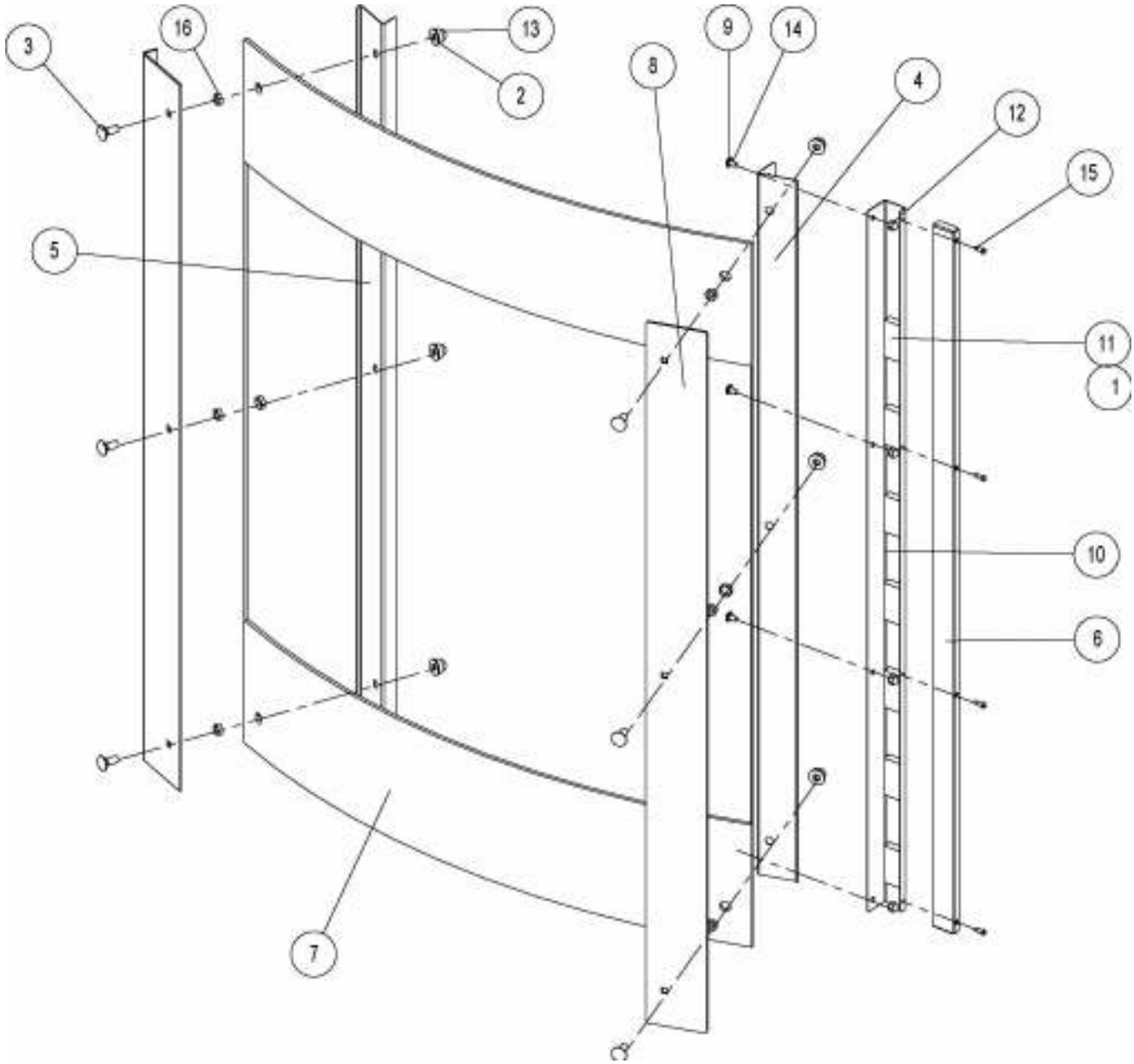


Table 15. *Outer Door Assembly Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	TP0037	1	TAPE, 7/8 DBL SIDE 3M6381 WHITE
2	WSH038	6	WASHER, 1/4 USS FLAT
3	BLT257	6	BOLT, 1/4-20 X 5/8 CARRIAGE
4	FB45443303	1	BUMPER BRKT OUTER DOOR VG14
5	FB45443403	1	BUMPER BRKT OUTER DOOR VG14
6	FB45443503	1	COVER, MAGNET VG
7	GL0300M	1	GLASS, VG OUTER DOOR W/MATRIX
8	FB45443203	1	DOOR LATCH PLATE OUTER DOOR
9	WSH246	8	WASHER, #10 INT TOOTH S/S
10	FB45455703	1	MAGNET MOUNT, OUTER DOOR VG
11	MC0005	7	MAGNET, 1 7/8 X 7/8
12	NUT132	4	NUT, 10-24 SS 18-8 HEX CAP
13	NUT097	6	NUT, 1/4-20 SS 18-8 CAP
14	SCR434	4	SCREW, 10-24 X 3/8 PHIL TR HD
15	SCR006	4	SCREW, 8 X 1/2 PHIL PAN HEAD
16	SP0031	6	SPACER, PTFE-DOOR GLASS
17	WB30104100	1	HINGE OPER SIDE OUT.DOOR WELD CO

Figure 17. *Control Panel Assembly*

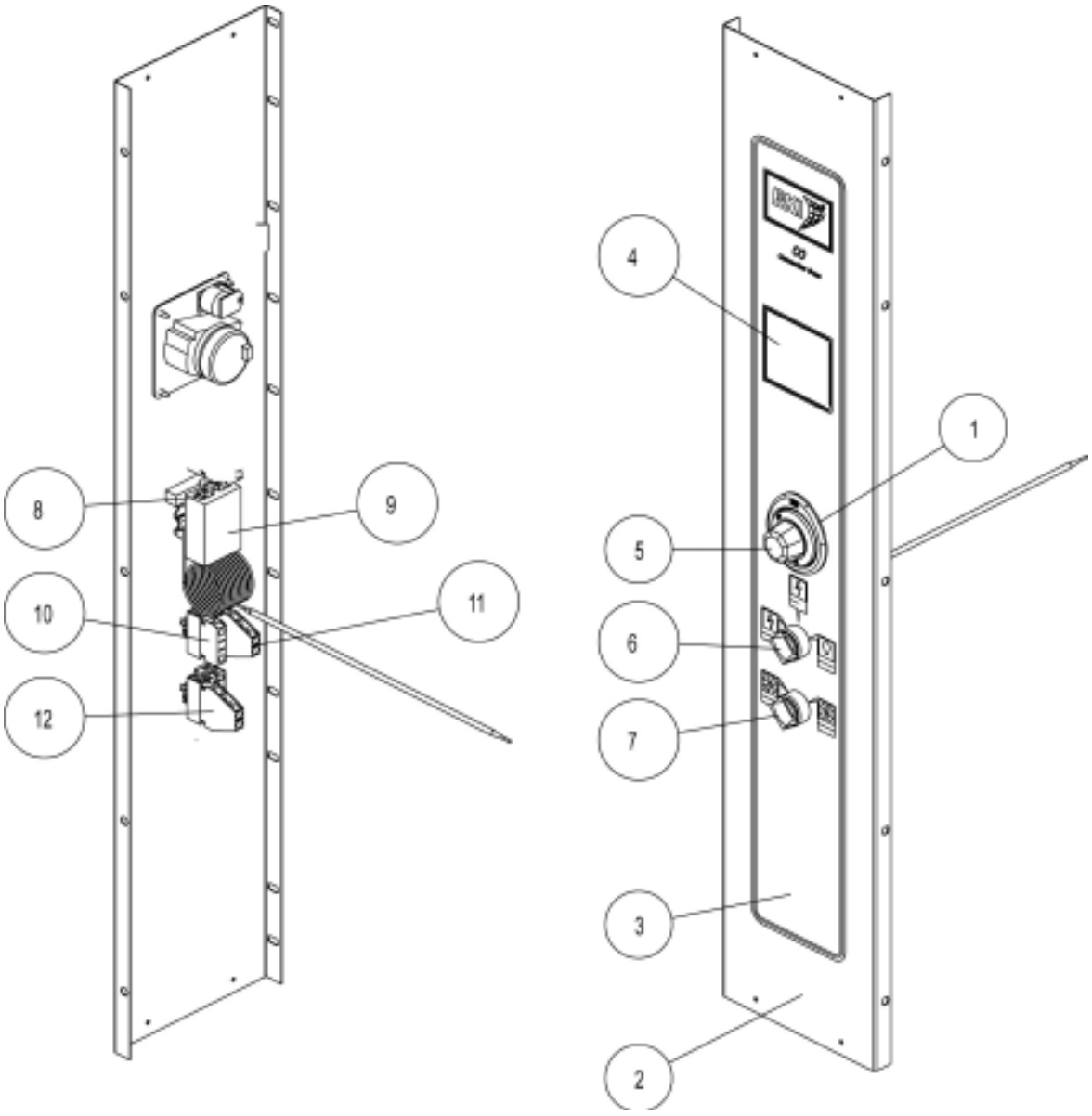


Table 16. *Control Panel Assembly Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	B1050	1	BEZEL, ROBERTSHAW THERMOSTAT
2	FB30101603	1	CONTROL PANEL, FRONT CO
3	N0530	1	DECAL, CONTROL PANEL CO
4	TI00032	1	DIGITAL TIMER, 4 Button
5	K0028	1	KNOB, T-STAT BLK 450DEG
6	S0338	1	SWITCH, 3 POS SATIN CHROME
7	S0304	2	SWITCH, 2 POS OPERATOR BLK
8	SCR117	2	SCREW, 6-32 X 3/8 PHIL RD HD
9	T0005	1	THERMOSTAT, 115-277V 450 DEG SGLPOLE
10	S0307	1	SWITCH, NO BLOCK GE P9B10VN
11	S0347	1	SWITCH, CONTACT BLOCK 2NC
12	S0339	2	SWITCH, CONTACT BLOCK 2 NO

Figure 18. *Blower Mounting Assembly*

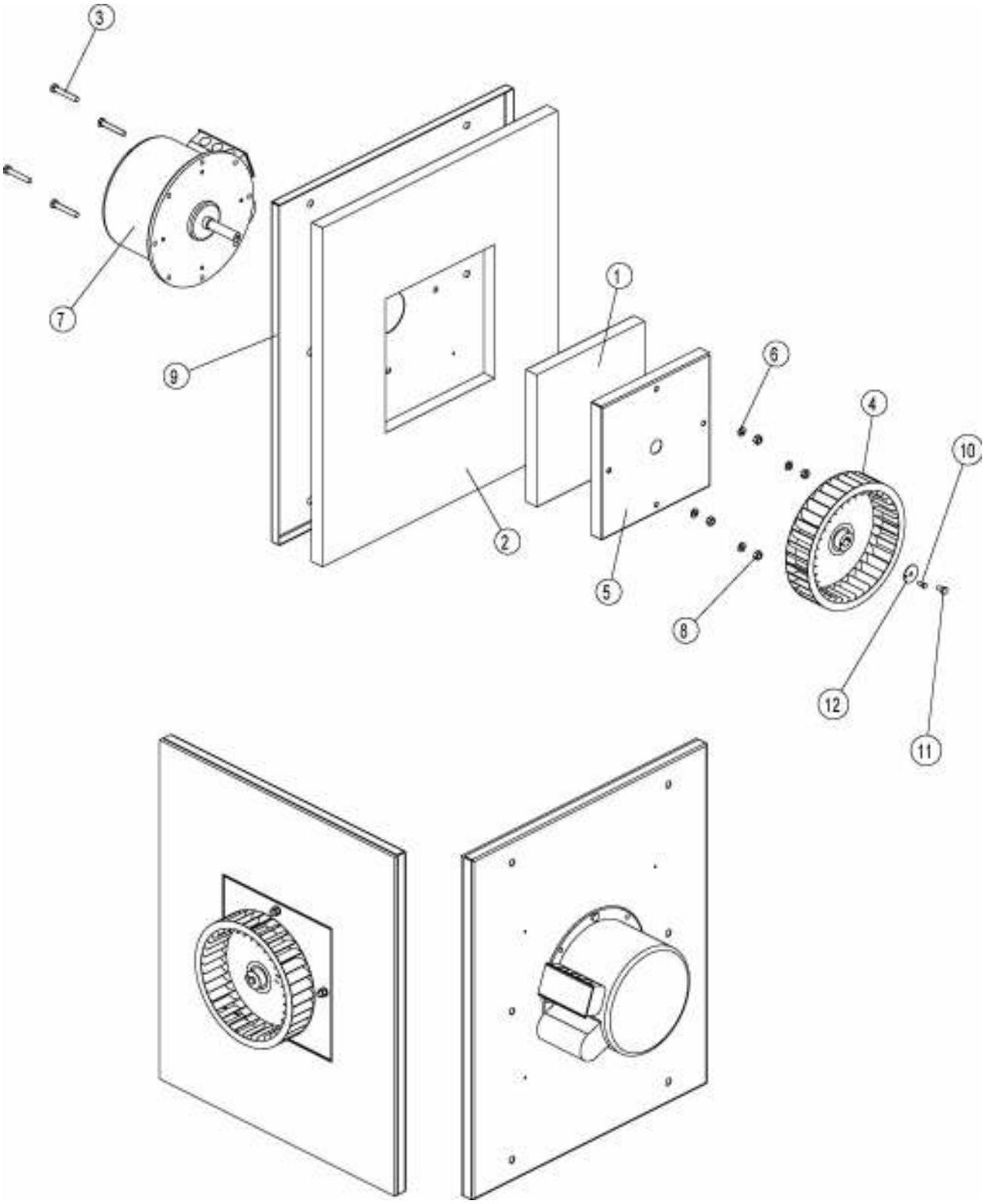


Table 17. *Blower Mounting Assembly Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	I0005	1	.7 SQ FT INSULATION
2	I0005	1	3.3 SQ FT INSULATION
3	SCR065	4	5/16"-18 x 2" HEX SCREW
4	SRCA067	1	FAN, BLOWER SRC (USES F0099)
5	SRCA045	1	PAN, INSULATION SRC
6	WSH045	4	LOCKWASHER,5/16" SPLIT - ZINC
7	M0032	1	MOTOR, HOWELL FAN 115/230
8	NUT055	4	NUT,5/16-18X1 FINISHED HEX
9	SRCA031	1	PANEL, OUTSIDE MOTOR SRC
10	SCR272	1	SCREW, 10-24 X 1/2 HEX HD MS
11	SCR273	1	SCREW, 1/4-20 X 1/2 HEX HD
12	SRCA069	1	WASHER, BLOWER MOTOR SRC

Figure 19. *Caster Base Assembly*

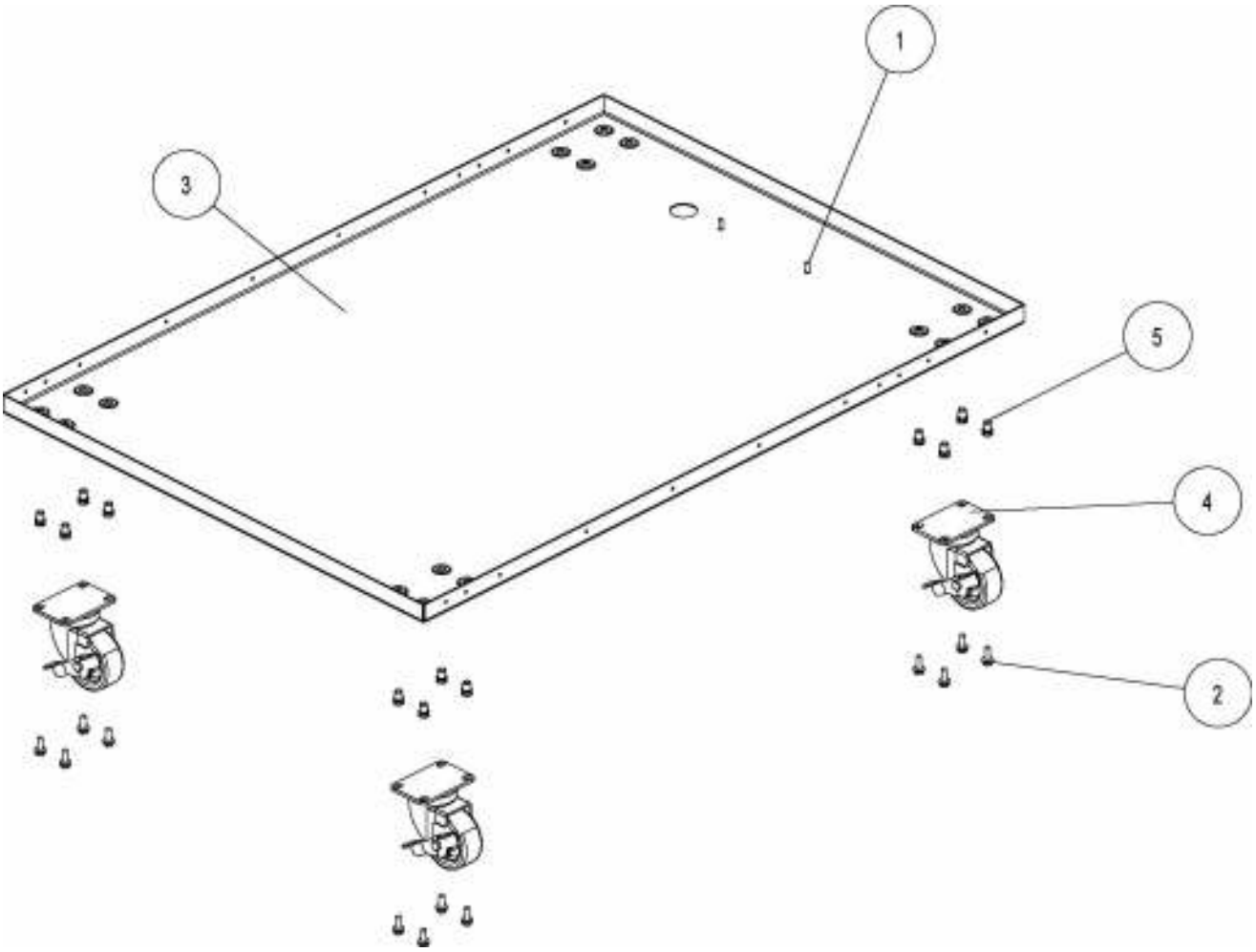
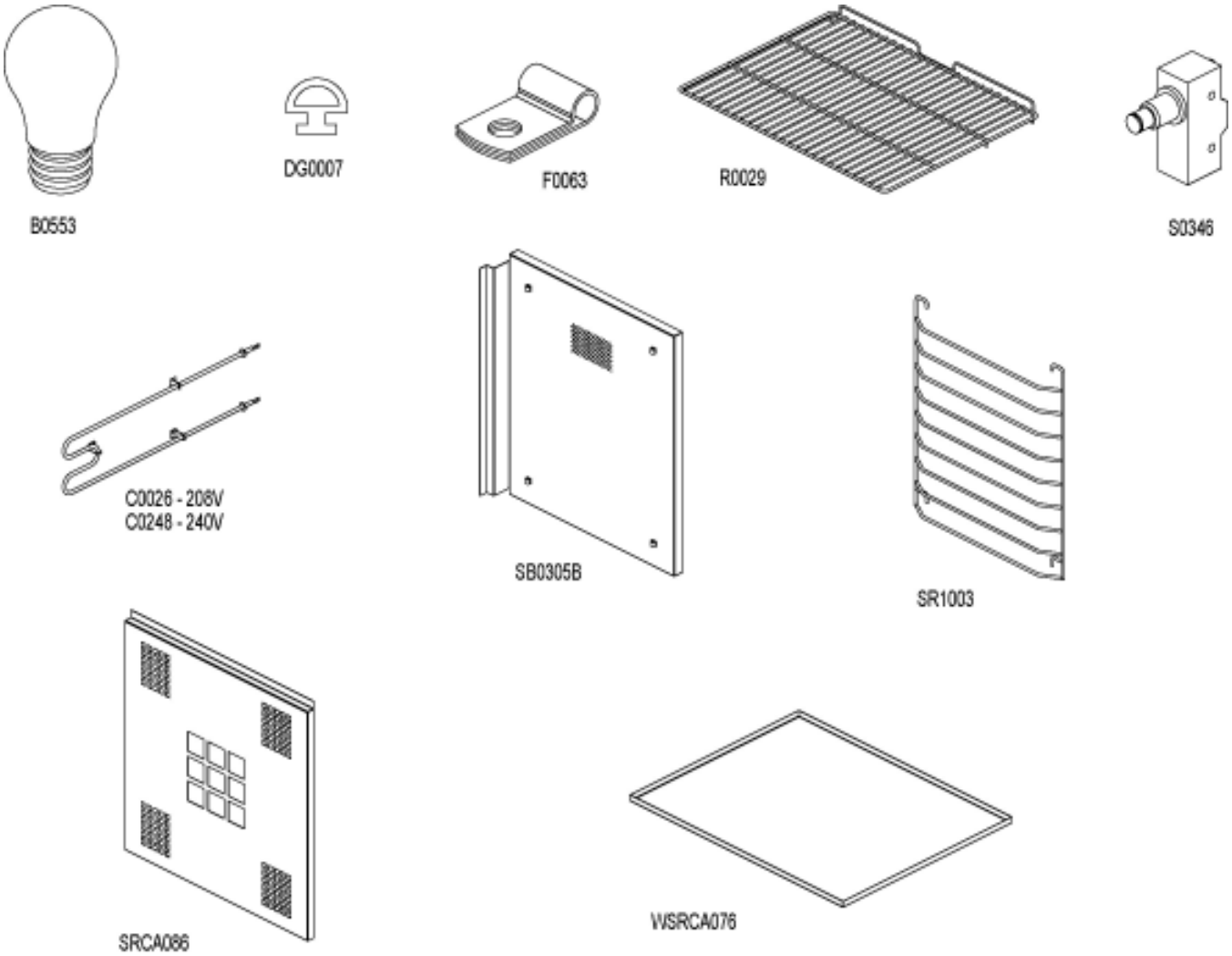


Table 18. *Caster Base Assembly Parts*

ITEM #	PART #	QTY	DESCRIPTION
1	SCR077	2	SCREW, STUD 10-24 X 1/2 WELD
2	SCR463	16	SCREW, 1/4-20 X 3/4 SERR FLNGD HEX
3	WB30101400	1	BOTTOM OUTSIDE WELDMENT CO
4	C0415	4	CASTER, 3" 3-30-521-2 JARVIS
5	F0140	16	THREAD INSERT 1/4-20 STL HEX

Components

PART #	DESCRIPTION
B0553	BULB, TUFFSKIN 40W 250V
DG0007	GASKET, BULB DOOR SEAL
F0063	CLAMP, SAFETY 16101-S 1/4 DIA
R0029	RACK, 19 1/4 X 25 3/4
S0346	SWITCH, MICRO 15A 125-480VAC
C0026 C0248	CALROD, 208V 2000W CALROD, 240V 2000W
SB0305B	SIDE INSERT ASSY, ELEC NKL SRC
SR1003	RACK, SIDE TRAY SRC
SRCA086	INSIDE BLOWER CABINET, SRC
WSRCA076	SRC INSIDE BOTT PAN WELD

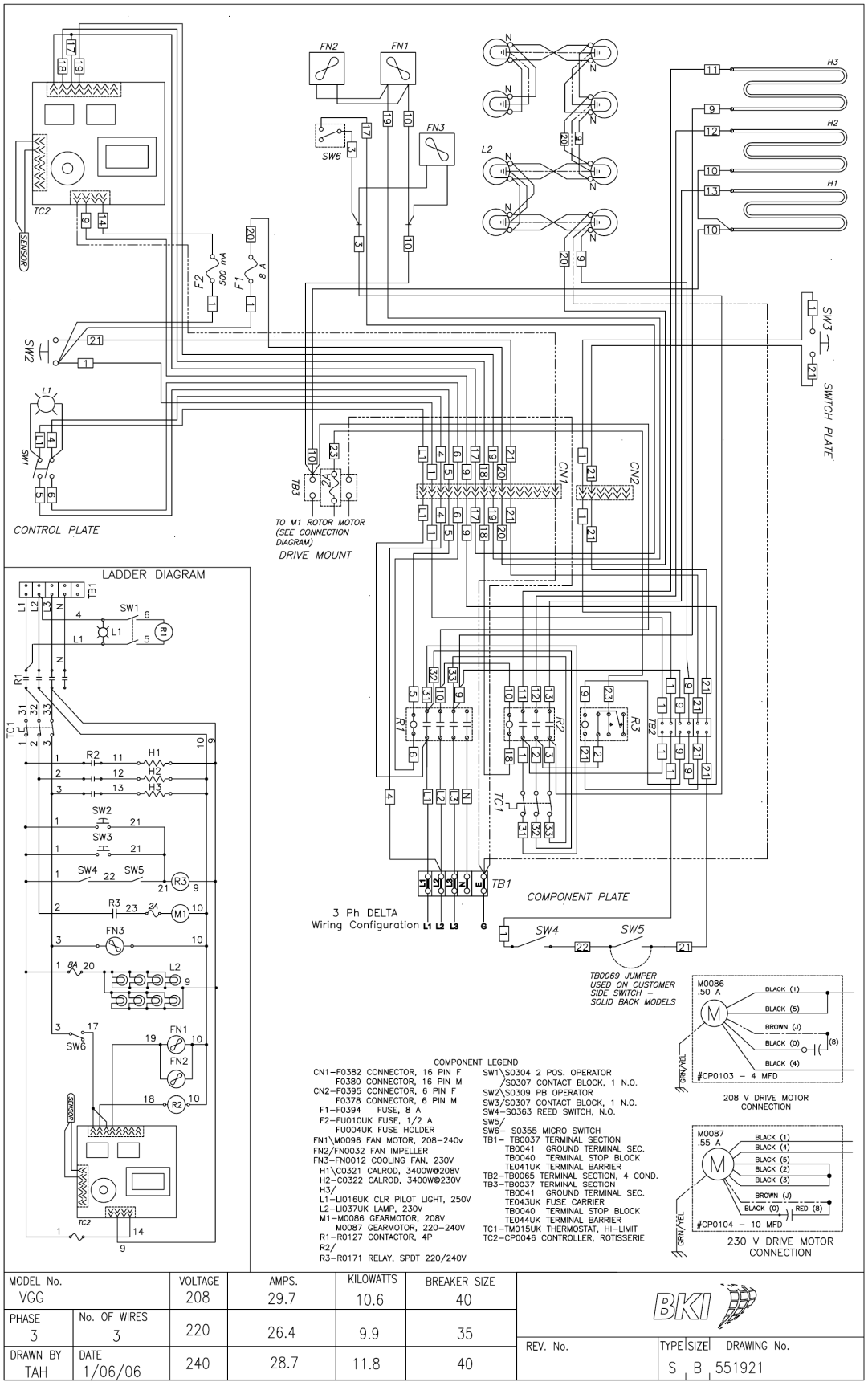


Wiring Diagrams

Refer to the table below to find the wiring diagram associated with your unit.

Wiring Diagram	Part #	Figure #	Page #
208V/220V/240V, 3 Phase	SB55192100	Figure 20	59
230/400-240/415, 50Hz, 3 Phase	SB55192200	Figure 21	60
208/240V, 3 Phase	SB301909	Figure 22	61

Figure 20. *208V/220V/240V, 3 Phase (SB55192100)*

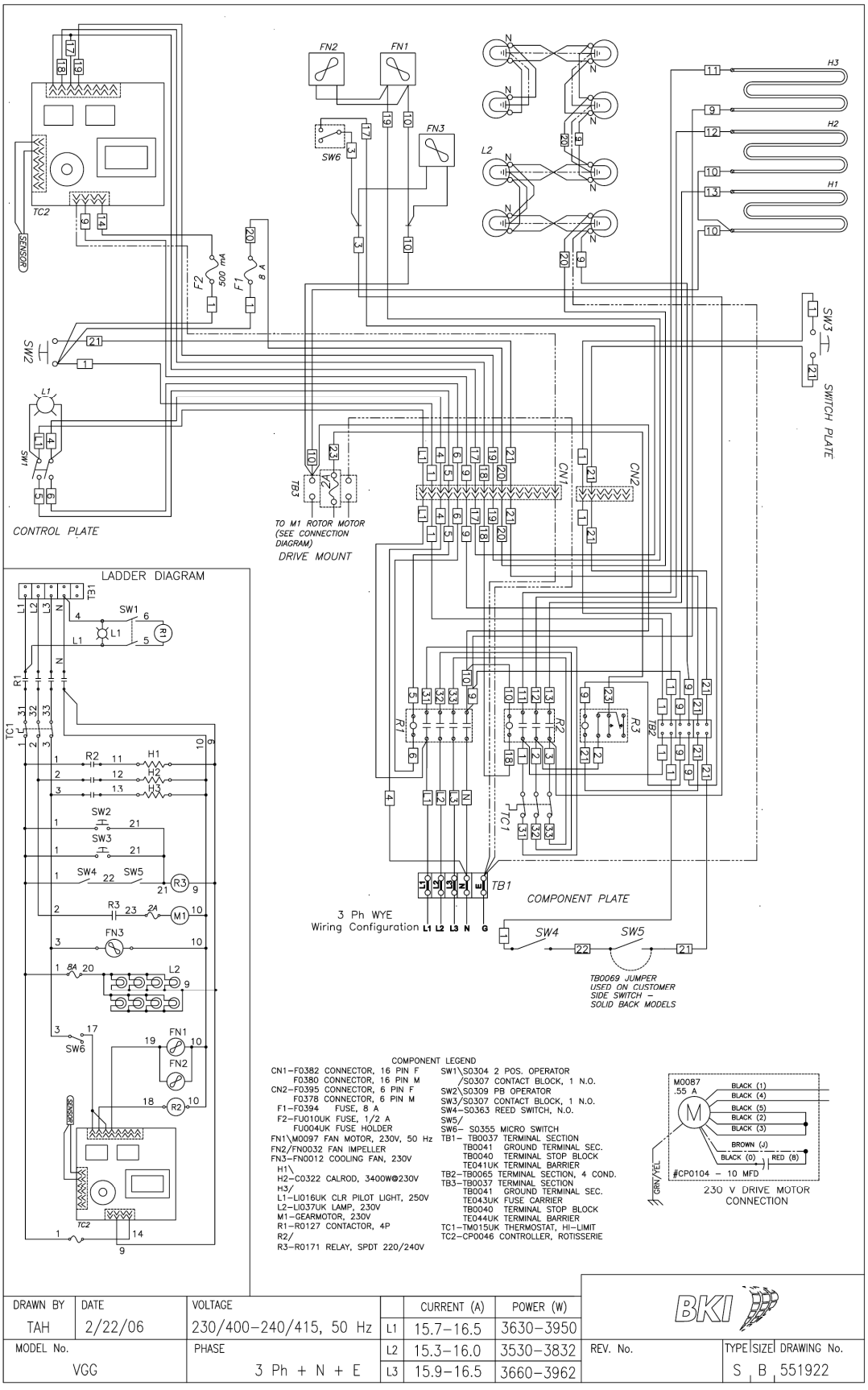


MODEL No.		VOLTAGE	AMPS.	KILOWATTS	BREAKER SIZE
VGG		208	29.7	10.6	40
PHASE	No. OF WIRES	220	26.4	9.9	35
3	3				
DRAWN BY	DATE	240	28.7	11.8	40
TAH	1/06/06				

BKI

REV. No.	TYPE	SIZE	DRAWING No.
	S	B	551921

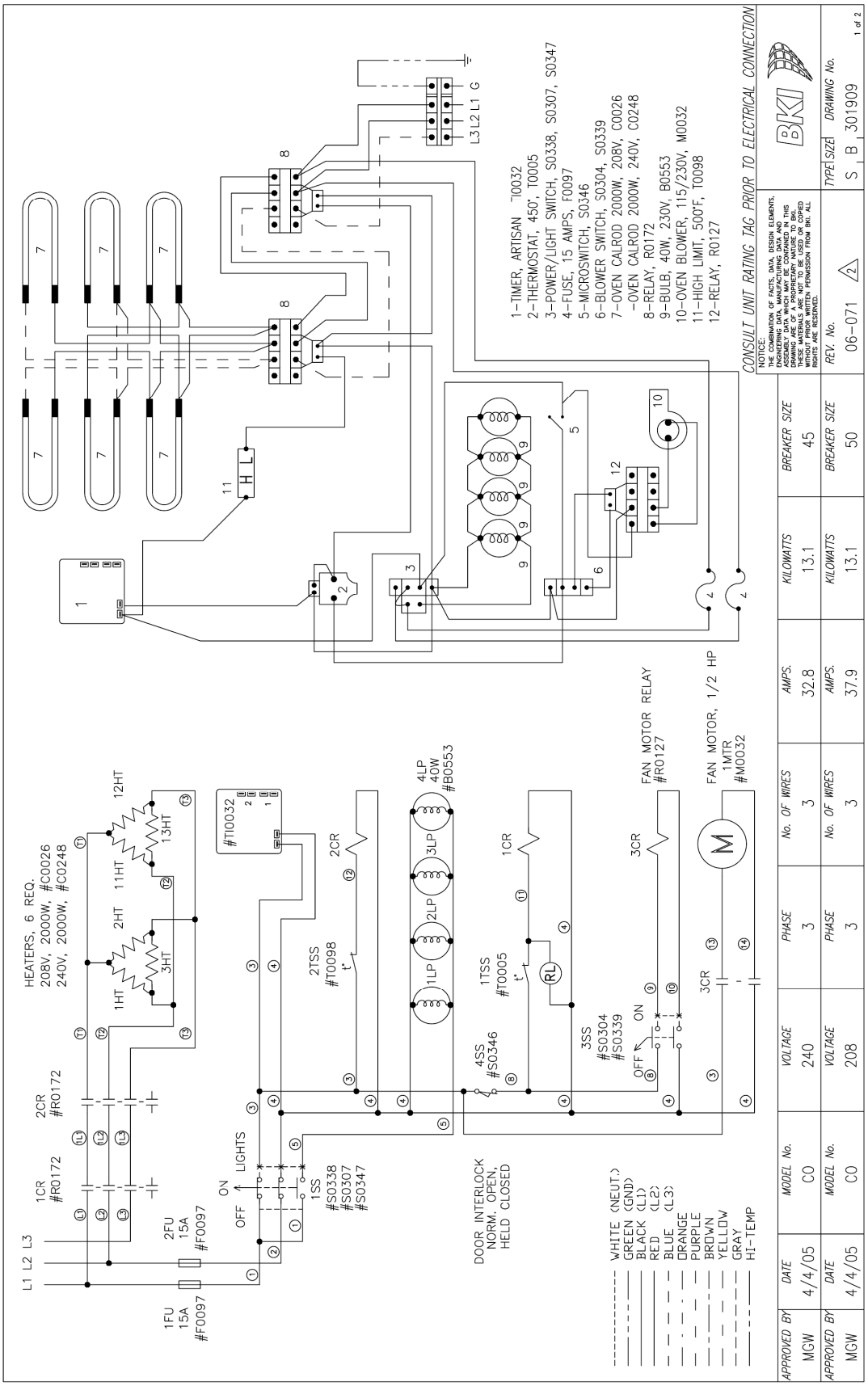
Figure 21. *230/400-240/415, 50Hz, 3 Phase (SB55192200)*

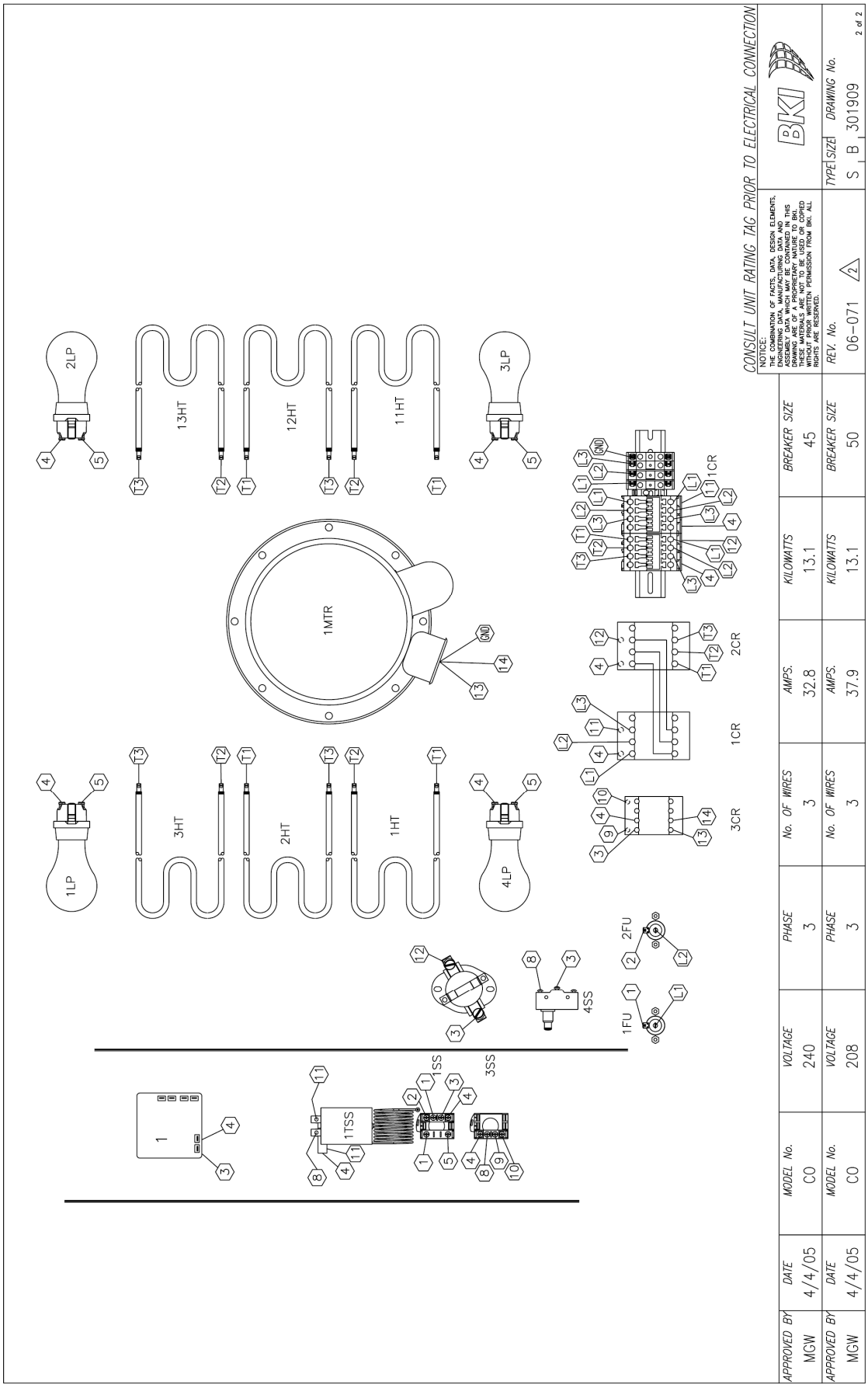


DRAWN BY	DATE	VOLTAGE		CURRENT (A)	POWER (W)
TAH	2/22/06	230/400–240/415, 50 Hz	L1	15.7–16.5	3630–3950
MODEL No.		PHASE	L2	15.3–16.0	3530–3832
VGG		3 Ph + N + E	L3	15.9–16.5	3660–3962

REV. No.	TYPE	SIZE	DRAWING No.
	S	B	551922

Figure 22. *208/240, 3 Phase (SB301909)*


1-TIMER, ARTISAN T0032
2-THERMOSTAT, 450°, T0005
3-POWER/LIGHT SWITCH, S0338, S0307, S0347
4-FUSE, 15 AMPS, F0097
5-MICROSWITCH, S0346
6-BLOWER SWITCH, S0304, S0339
7-OVEN CALROD 2000W, 208V, C0026
-OVEN CALROD 2000W, 240V, C0248
8-RELAY, R0172
9-BULB, 40W, 230V, B0553
10-OVEN BLOWER, 115/230V, M0032
11-HIGH LIMIT, 500°F, T0098
12-RELAY, R0127
CONSULT UNIT RATING TAG PRIOR TO ELECTRICAL CONNECTION
NOTICE:
THE COMPILATION OF FACTS, DATA, DESIGN, ELEMENTS, ENGINEERING DATA, MANUFACTURING DATA AND ASSEMBLY DATA, WHICH MAY BE CONTAINED IN THIS DRAWING OR ACCOMPANYING MATERIALS, OR ANY OF THESE MATERIALS ARE NOT TO BE USED OR COPIED WITHOUT PRIOR WRITTEN PERMISSION FROM BKI. ALL RIGHTS ARE RESERVED.
BKI
REV. No. 06-071
TYPE SIZE DRAWING No. S B 301909
1 of 2
BREAKER SIZE 45 KILOWATTS 13.1 AMPS. 32.8 No. OF WIRES 3 PHASE 3 VOLTAGE 240 MODEL No. CO DATE 4/4/05 APPROVED BY MGW
BREAKER SIZE 50 KILOWATTS 13.1 AMPS. 37.9 No. OF WIRES 3 PHASE 3 VOLTAGE 208 MODEL No. CO DATE 4/4/05 APPROVED BY MGW
L1 L2 L3
1FU 15A #F0097
2FU 15A #F0097
1CR #R0172
2CR #R0172
ON OFF LIGHTS
1SS #S0338 #S0307 #S0347
DOOR INTERLOCK NORM. OPEN, HELD CLOSED
HEATERS, 6 REQ. 208V, 2000W, #C0026 240V, 2000W, #C0248
1HT 2HT 3HT 11HT 12HT 13HT
#T10032
2TSS #T0098
2CR
1LP 2LP 3LP 4LP 40W #B0553
1TSS #T0005
1CR
4SS #S0346
3SS #S0304 #S0339
ON OFF
3CR
FAN MOTOR RELAY #R0127
FAN MOTOR, 1/2 HP 1MTR #M0032
WHITE (NEUT.)
GREEN (GND)
BLACK (L1)
RED (L2)
BLUE (L3)
ORANGE
PURPLE
BROWN
YELLOW
GRAY
HI-TEMP
L3 L2 L1 G


CONSULT UNIT RATING TAG PRIOR TO ELECTRICAL CONNECTION
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TYPE SIZE S B DRAWING No. 301909
2 of 2
APPROVED BY MGW DATE 4/4/05 MODEL No. CO VOLTAGE 240 PHASE 3 No. OF WIRES 3 AMPS. 32.8 KILOWATTS 13.1 BREAKER SIZE 45
APPROVED BY MGW DATE 4/4/05 MODEL No. CO VOLTAGE 208 PHASE 3 No. OF WIRES 3 AMPS. 37.9 KILOWATTS 13.1 BREAKER SIZE 50
2LP
13HT
12HT
11HT
3LP
1MTR
1CR
1LP
3HT
2HT
1HT
4LP
2CR
1CR
3CR
2FU
1FU
4SS
1
1TSS
1SS
3SS

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REVISION HISTORY

REVISION	DATE	REVISED BY	DESCRIPTION
01	03/28/13	KW	Initial Release-Supersedes all previous releases